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NORTH AMERICAN FLORA

PHYLLOSTICTALES

PHYLLOSTICTACEAE (pars)

FRED JAY SEAVER

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ANNOUNCEMENT

NORTH AMERICAN FLORA is designed to present in one work descriptions of all plants growing, independent of cultivation, in North America, here taken to include Greenland, Central America, the Republic of Panama, and the West Indies, except Trinidad, Tobago, and Curaçao and other islands off the north coast of Venezuela, whose flora is essentially South American.

The work will be published in parts at irregular intervals, by the New York Botanical Garden, through the aid of the income of the David Lydig Fund bequeathed by Charles P. Daly.

It is planned to issue parts as rapidly as they can be prepared, the extent of the work making it possible to commence publication at any number of points. The completed work will form a series of volumes with the following sequence:

Volume 1. Myxomycetes, Schizophyta.

Volumes 2 to 10. Fungi.

Volumes 11 to 13. Algae.

Volumes 14 and 15. Bryophyta.

Volume 16. Pteridophyta and Gymnospermae.

Volumes 17 to 19. Monocotyledones.

Volumes 20 to 34. Dicotyledones.

The preparation of the work has been referred by the Scientific Directors of the Garden to a committee consisting of Dr. N. L. Britton, Dr. W. A. Murrill, and Dr. J. H. Barnhart.

Professor John M. Coulter, of the University of Chicago; Mr. Frederick V. Coville, of the United States Department of Agriculture; and Professor William Trelease, of the University of Illinois, have consented to act as an advisory committee.

Each author will be wholly responsible for his own contributions, being restricted only by the general style adopted for the work, which must vary somewhat in the treatment of diverse groups.

The subscription price is fixed at $1.50 for each part; it is expected that four or five parts will be required for each volume. A limited number of separate parts will be sold at $2.00 each. Address:

THE NEW YORK BOTANICAL GARDEN

BRONX PARK

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Class DEUTEROMYCETES

The fungi included in this very large group comprise a variety of forms which are similar to the conidial stages of some of the ascomycetes. Many of the forms doubtless represent the conidial stage of ascomycetes whose life histories have not been worked out, while others may have entirely lost their perfect stages. Other species which are considered imperfect fungi may never have had such connection but are included because of their analogy with those forms which are known or are suspected to have such relationship. The plants of this group are classified in orders and families in the same manner as the perfect fungi. The genera are usually treated in the same manner as the form-genera in other polymorphic fungi such as the rusts. As in other form-genera in the parasitic forms the hosts play an important part in the determination of species.

Order PHYLLOSTICTALES*

By Fred Jay Seaver

Spores (conidia) produced in perithecium-like bodies which are known as pycnidia, the pycnidia globose, subglobose, or more or less elongate, either entirely closed or opening by means of a pore or ostiolum, or a slit-like aperture, or more rarely with the spore-surface freely exposed at maturity. Spores globose to filiform or vermiform, hyaline or colored, simple or compound, when compound 1-septate to many-septate or muriform.

Pycnidia more or less globose or flask-shaped.	
Pycnidial wall black, membranaceous, leathery, or carbonaceous.	Fam. 1. Phyllostictaceae.
Pycnidial wall and stroma bright-colored, fleshy or waxy.	Fam. 2. Aschersoniaceae.
Pycnidia not globose or flask-shaped.	
Pycnidia more or less superficial, shield-shaped, opening with a slit-like aperture.	Fam. 3. Leptostromataceae.
Pycnidia more or less scutellate, at first closed, the fruiting surface finally freely exposed.	Fam. 4. Excipulaceae.

* Used in place of *Sphaeropsidales*. The genus *Sphaeropsis* was founded by Léveillé in 1842 (Demidoff, Voyage 2: 112) upon *Sphaeropsis conica* Lév. which is a synonym of *Amphisphaeria conica*, an ascomycete. Since the generic name *Sphaeropsis* goes out of the order, the name *Sphaeropsidales* becomes untenable and is here replaced by the name *Phyllostictales*.

Family 1. PHYLLOSTICTACEAE

By Fred Jay Seaver

Pycnidia membranaceous, carbonaceous, or leathery, black or brownish-black (never bright-colored nor fleshy), globose, subglobose, flask-shaped, or lenticular, closed or opening by means of a pore, superficial or immersed, with or without stroma (occasionally consisting of cavities in the stroma without definite pycnidial wall); spores very variable in form, hyaline or colored; conidiophores usually simple and short, more rarely branched.

Spores globose to ellipsoid, often elongate but not filiform nor vermiform.	
Spores simple (not septate).	
Spores remaining permanently hyaline or subhyaline.	Tribe 1. Phyllostictеae.
Spores becoming brown.	Tribe 2. Macroplodieae.
Spores compound (becoming septate).	
Spores with transverse septa only.	
Spores becoming 1-septate.	
Spores remaining permanently hyaline.	Tribe 3. Diplodineeae.
Spores becoming brown.	Tribe 4. Diplodinelleae.
Spores becoming more than 1-septate.	
Spores remaining permanently hyaline.	Tribe 5. Hendersonieae.
Spores becoming brown.	Tribe 6. Phaeohendersonieae.
Spores becoming muriform (with transverse and longitudinal septa).	Tribe 7. Camarosporieae.
Spores filiform or vermiform, very long, usually septate.	Tribe 8. Septarieae.

Tribe 1. Phyllostictеae*

1. PHYLLOSTICTA Pers. Champ. Comest. 55, 147. 1818.

?*Depazea* Fries, Obs. Myc. **2**: 364. 1818.
Sacidium Kunze & Schmidt, Myk. Hefte **2**: 64. 1823.

Parasitic on leaves or more rarely on fruits of the higher plants, giving rise to rather conspicuous spots of variable size and form, the spots consisting of discolored portions of the host which have been killed by the fungus and in some cases covering a large portion of the leaf; pycnidia minute, black or blackish, usually globose or subglobose, more rarely depressed and shield-shaped, entirely closed or opening by an ostiolum, usually scattered over the spot, and often more or less erumpent, occasionally congested into a stroma; spores produced on stems (sporophores) within the pycnidium, globose to ellipsoid or short-cylindric, hyaline or subhyaline, simple (1-celled).

Type species, *Phyllosticta Convallariae* Pers.

Spores very large, 10–22 μ long.	I. Macrostictеae.
Spores medium-sized, 5–10 μ long.	II. Microstictеae.
Spores small, usually less than 5 μ long, often rod-like or bacilliform.	III. Bacillostictеae.

I. MACROSTICTEAE

On Monocotyledonous Hosts

Spores only slightly longer than broad.	
Spots blood-red, at least when young; on Convallariaceae.	1. *P. Convallariae.*
Spots brownish or yellowish; on Dioscoreaceae.	2. *P. Dioscoreae.*
Spores two to three times as long as broad.	
Spores about twice as long as broad or averaging less than three times.	
Spores not more than 15 μ long.	
Spores 4–5 $\times$ 9–14 μ; on Commelinaceae.	3. *P. commelinicola.*
Spores 5 $\times$ 10 μ; on Orchidaceae.	4. *P. Aplectri.*

* The key to the genera of this tribe will be published in a later number of the Flora. The genus *Phyllosticta* differs from *Phoma* in that the pycnidia usually occur on definite spots on living leaves and from other genera of the tribe in that the spores are short, simple and hyaline.

Spores 14–20 μ long.
Spots 5–10 mm. in diameter; on Convallariaceae. 5. *P. Oakesiae.*
Spots indefinite; on Iridaceae. 6. *P. Gladioli.*
Spores three or more times as long as broad.
Spots blood-red when young; on Amaryllidaceae. 7. *P. Hymenocallidis.*
Spots whitish or brown, never blood-red.
Spots circular or subcircular.
On Arecaceae. 8. *P. Palmetto.*
On Trilliaceae. 9. *P. Trillii.*
Spots irregular or indefinite.
On Trilliaceae. 10. *P. Medeolae.*
On Iridaceae. 11. *P. Iridis.*

On Dicotyledonous Hosts

On Cactaceae

On *Opuntia.* 12. *P. concava.*

On Herbaceous Hosts

Occurring on Carduaceae.
Spores 16–20 μ long; on *Artemisia.* 13. *P. Raui.*
Spores not exceeding 16 μ long and usually less.
Spores three times as long as broad; on *Rudbeckia.* 14. *P. Rudbeckiae.*
Spores about twice as long as broad.
On *Solidago.*
Growing on insect galls. 15. *P. gallicola.*
Not on insect galls.
Spores on long pedicels. 16. *P. sphaeropsispora.*
Spores not on long pedicels. 17. *P. similispora.*
On other hosts.
Spores 4 × 10 μ; on *Lacinaria.* 18. *P. Liatridis.*
Spores 4–5 × 8–12 μ; on *Doellingeria.* 19. *P. astericola.*
Occurring on hosts other than Carduaceae.
Spores less than twice as long as broad; on Apocynaceae. 20. *P. Apocyni.*
Spores about three times as long as broad.
Spores less than 2 μ broad; on Rosaceae. 21. *P. obscurans.*
Spores more than 2 μ broad.
Spores less than 3 μ broad; on Solanaceae. 22. *P. Solani.*
Spores 3 μ or more broad.
Spores 3–5 × 10–12 μ.
On Amaranthaceae. 23. *P. Amaranthi.*
On Caryophyllaceae. 24. *P. Silenes.*
On Cucurbitaceae. 25. *P. citrullina.*
Spores 3–5 × 12–16 μ.
Spots irregular; on Diapensiaceae. 26. *P. Galactis.*
Spots circular or subcircular.
Spots with tufts of mycelial hairs; on Malvaceae. 27. *P. spinosa.*
Spots without mycelial hairs.
On Cannabinaceae. 28. *P. Humuli.*
On Asclepiadaceae. 29. *P. tuberosa.*

On Woody Hosts; Trees, Shrubs, or Vines

Spores very large, averaging 15–22 μ long.
Spores broadly ellipsoid, 4–8 μ broad.
Spots not usually exceeding 3–4 mm. in diameter; on Fagaceae. 30. *P. phomiformis.*
Spots reaching a diameter of 1 cm. or more.
Usually terminal or marginal, rarely internal.
On Ericaceae. 31. *P. maxima.*
On Apocynaceae. 32. *P. Nerii.*
On various hosts. 33. *P. terminalis.*
Usually internal, rarely terminal or marginal.
Spots surrounded by concentric rings or bands.
On Artocarpaceae; spores 4–5 × 12–20 μ. 34. *P. Roberti.*
On Oleaceae; spores 5–7 × 15–20 μ. 35. *P. Halstedii.*
Spots not surrounded by concentric rings.
On Grossulariaceae; spores 6–9 × 15–22 μ. 36. *P. Ellisii.*
On Caesalpiniaceae; spores 6–7 × 15–20 μ. 37. *P. cercidicola.*
Spores narrowly ellipsoid, less than 4 μ broad.
Spots very small, scarcely exceeding 1 mm. in diameter, often deciduous; on Aceraceae. 38. *P. saccharina.*
Spots large and often indefinite.
Usually terminal or marginal.
On Oleaceae. 39. *P. Oleae.*
On Loganiaceae. 40. *P. Gelsemii.*
Usually indefinite.
On Fagaceae. 41. *P. fusispora.*
On Caprifoliaceae. 42. *P. lineola.*
Spores moderately large, averaging 10–15 μ long.
Spores globose or subglobose, less than twice as long as broad.

Spores globose or nearly so; on Sapotaceae. 43. *P. bumeliifolia.*
Spores subglobose to very broadly ellipsoid.
Spots small, about 2 mm. in diameter; on Euphorbiaceae. 44. *P. portoricensis.*
Spots large, 1 to several cm. in diameter.
Color pale-yellow or whitish; on Celastraceae. 45. *P. pallens.*
Color dark-brown or brownish.
On Hamamelidaceae. 46. *P. Hamamelidis.*
On Aesculaceae. 47. *P. Paviae.*
Spores broadly ellipsoid, about twice as long as broad or less than three times.
Spots inclined to be deciduous.
Spots 2–4 mm. in diameter, opaque; on Myrtaceae. 48. *P. Eugeniae.*
Spots 8 mm. in diameter, translucent; on Aceraceae. 49. *P. Negundinis.*
Spots usually persistent.
Spots circular or subcircular.
On Magnoliaceae. 50. *P. Cookei.*
On Araliaceae. 51. *P. Everhartii.*
Spots usually irregular, often terminal or marginal.
Pycnidia 250–300 μ in diameter; on Fagaceae. 52. *P. Wislizeni.*
Pycnidia not more than 200 μ in diameter.
On Rutaceae. 53. *P. adusta.*
On Sapotaceae. 54. *P. Sapotae.*
On Araliaceae. 55. *P. concentrica.*
Spores narrowly ellipsoid, about three times as long as broad.
Spores averaging 3–5 μ broad.
Spots 2–4 mm. in diameter; on Mimosaceae. 56. *P. juliflora.*
Spots 1 to several cm. in diameter.
Spores 3–4 × 7–13 μ.
On Fagaceae.
On *Fagus.* 57. *P. faginea.*
On *Quercus.* 58. *P. Quercus.*
On Hydrangeaceae. 59. *P. Hydrangeae.*
Spores 4–5 × 10–12 μ.
On Aquifoliaceae. 60. *P. ilicicola.*
On Vacciniaceae. 61. *P. Vaccinii.*
Spores averaging 3 μ or less broad.
Spots caused apparently by insect punctures. 62. *P. tumoricola.*
Spots not caused by insect punctures.
On Garryaceae. 63. *P. Garryae.*
On other hosts.
Spots not usually exceeding 3 mm. in diameter.
Spores 1.5–2 × 6–15 μ; on Oleaceae. 64. *P. sinuosa.*
Spores 2–3 × 6–12 μ.
Spores 3 × 12 μ; on Amygdalaceae. 65. *P. serotina.*
Spores 2–3 × 6–12 μ; on Solanaceae. 66. *P. Lycii.*
Spots reaching a diameter of 1 cm. or more.
Plants tropical; on Tiliaceae. 67. *P. Stevensii.*
Plants temperate.
On Juglandaceae. 68. *P. subtilis.*
On Artocarpaceae. 69. *P. Maclurae.*
On Lauraceae. 70. *P. lindericola.*
On Fabaceae. 71. *P. Wistariae.*
Spots indefinite, covering a part or all of the leaf.
Spores 3–3.5 × 10–14 μ.
On Salicaceae. 72. *P. maculans.*
On Theaceae. 73. *P. Gordoniae.*
Spores 2–3 × 10 μ.
On Malaceae. 74. *P. Pyrorum.*
On Amygdalaceae. 75. *P. Laurocerasi.*

II. MICROSTICTEAE

On Ferns

On *Adiantum.* 76. *P. adianticola.*

On Monocotyledonous Hosts

Spores broadly ellipsoid, not or scarcely more than twice as long as broad.
Spores 3–4 μ broad.
Spores 3 × 4–5 μ; on Liliaceae. 77. *P. Lilii.*
Spores 3–4 × 5–7 μ; on Dracaenaceae. 78. *P. yuccaegena.*
Spores 4–5 × 9.5 μ; on Poaceae. 79. *P. Panici.*
Spores narrowly ellipsoid, more than twice as long as broad.
Spores 2–2.5 × 6–7 μ; on Araceae. 80. *P. Orontii.*
Spores 3 × 7 μ; on Dracaenaceae. 81. *P. maculicola.*

On Dicotyledonous Hosts

On Herbaceous Hosts

Spores subglobose and rather large.
- On Fabaceae.
  - Spores containing one large oil-drop. — 82. *P. macroguttata.*
  - Spores without conspicuous oil-drop. — 83. *P. Meibomiae.*
- On other hosts.
  - Spots terminal, often covering a third of the leaf; on Apocynaceae. — 84. *P. minor.*
  - Spots not terminal.
    - Spots irregular, large, reaching 1 cm.; spores 7 × 9 μ; on Podophyllaceae. — 85. *P. Podophylli.*
    - Spots circular or subcircular, rather small; spores 3.5–7 μ long.
      - On Saxifragaceae. — 86. *P. Mitellae.*
      - On Pyrolaceae. — 87. *P. Pyrolae.*
      - On Primulaceae.
        - Spores ellipsoid or nearly globose, 2–5 × 3.5–7 μ. — 88. *P. Dodecathei.*
        - Spores subglobose, 5–6 μ in diameter. — 89. *P. Steironematis.*
      - On Gentianaceae. — 90. *P. gentianaecola.*

Spores broadly ellipsoid, not or scarcely more than twice as long as broad, usually less.
- Spores 2–3 × 4–7 μ.
  - On Urticaceae. — 91. *P. boehmeriicola.*
  - On Polygonaceae. — 92. *P. Polygonorum.*
- Spores 3–4 × 5.5–7 μ.
  - On Cucurbitaceae. — 93. *P. sicyna.*
  - On Carduaceae. — 94. *P. Pitcheriana.*
- Spores 4–5 × 6–9 μ.
  - Spores containing two conspicuous oil-drops; on Onagraceae. — 95. *P. Ludwigiae.*
  - Spores without conspicuous oil-drops.
    - Spots large, reaching a diameter of 1 cm.; on Chenopodiaceae. — 96. *P. Betae.*
    - Spots small, not usually exceeding 5 mm., often less.
      - On Apocynaceae. — 97. *P. glaucispora.*
      - On Convolvulaceae. — 98. *P. Batatas.*

Spores narrowly ellipsoid, more than twice as long as broad, usually three times.
- Spores averaging 3–4 × 6–10 μ.
  - Spots subcircular, not exceeding 2–3 mm. in diameter.
    - Spots translucent and often deciduous; on Caryophyllaceae. — 99. *P. tenerrima.*
    - Spots not translucent and not deciduous.
      - On Verbenaceae. — 100. *P. verbenicola.*
      - On Carduaceae. — 101. *P. Lappae.*
  - Spots large, often covering a large part of the leaf, usually irregular, rarely subcircular.
    - Spots definite, subcircular or irregular; on Nymphaeaceae. — 102. *P. fatiscens.*
    - Spots indefinite and irregular.
      - Spots occurring on the tips and margins of the leaves; on Rutaceae. — 103. *P. Dictamni.*
      - Spots covering most or all of the leaf.
        - Spores ellipsoid or almond-shaped; on Tetragoniaceae. — 104. *P. Molluginis.*
        - Spores ellipsoid or short-cylindric; on Oxalidaceae. — 105. *P. guttulata.*
- Spores averaging 2–3 × 5–10 μ.
  - On Carduaceae.
    - Spots large, 5 to 10 mm. in diameter; on *Petasites.* — 106. *P. Petasitidis.*
    - Spots small, 1–5 mm. in diameter.
      - Spots indefinite, 4–5 mm.; on *Antennaria.* — 107. *P. Antennariae.*
      - Spots subcircular, not exceeding 2–3 mm. in diameter.
        - Spores 2.5–3 × 4–6 μ; on *Verbesina.* — 108. *P. Verbesinae.*
        - Spores 2–3 × 5–7 μ; on *Cirsium.* — 109. *P. Cirsii.*
  - On Solanaceae.
    - On *Lycopersicon.* — 110. *P. Lycopersici.*
    - On *Solanum.*
      - Infected tissues becoming translucent. — 111. *P. Dulcamarae.*
      - Infected tissues not translucent. — 112. *P. hortorum.*
  - On Fabaceae.
    - Spots small, circular or subcircular; on *Mucuna.* — 113. *P. Mucunae.*
    - Spots large, indefinite in form.
      - Spots often covering the whole leaf; on *Medicago.* — 114. *P. Bonanseana.*
      - Spots terminal, marginal, or indefinite.
        - On *Lathyrus.* — 115. *P. orobella.*
        - On various legumes. — 116. *P. phaseolina.*
  - On Ranunculaceae.
    - Spots 3–4 mm. in diameter; on *Paeonia.* — 117. *P. Commonsii.*
    - Spots 8 mm. in diameter; on *Xanthorrhiza.* — 118. *P. Xanthorrhizae.*
  - On Cucurbitaceae.
    - On *Cucurbita.* — 119. *P. orbicularis.*
    - On *Sechium.* — 120. *P. Sechii.*
    - On *Cucumis.* — 121. *P. Cucurbitacearum.*

On other hosts.
Spots irregular, often covering a large part of the leaf.
On Caryophyllaceae. 122. *P. pallida.*
On Scrophulariaceae. 123. *P. Digitalis.*
Spots circular or subcircular in form.
Spots small, usually less than 5 mm. in diameter.
Spots deciduous and translucent; on Brassicaceae. 124. *P. orbicula.*
Spots not usually deciduous.
Spores allantoid; on Plantaginaceae. 125. *P. plantaginella.*
Spores not allantoid.
Spores containing two oil-drops; on Convolvulaceae. 126. *P. Ipomoeae.*
Spores without conspicuous oil-drops.
On Violaceae. 127. *P. Violae.*
On Lythraceae. 128. *P. Nesaeae.*
On Ambrosiaceae. 129. *P. ivaecola.*
Spots usually exceeding 5 mm. in diameter.
Spots marked with concentric rings.
On Nymphaeaceae. 130. *P. nymphaeacea.*
On Loasaceae. 131. *P. Mentzeliae.*
Spots not marked with concentric rings; on Verbenaceae. 132. *P. texensis.*
Spores averaging 1–2.5 × 5–7 μ.
Spots reaching a diameter of 1–5 mm.
On Papaveraceae. 133. *P. Sanguinariae.*
On Buxaceae. 134. *P. Pachysandrae.*
Spots reaching a diameter of 1 cm.
On Saxifragaceae. 135. *P. cylindrica.*
On Malvaceae. 136. *P. hibiscina.*
On Scrophulariaceae. 137. *P. Antirrhini.*

ON WOODY HOSTS; TREES, SHRUBS, OR VINES

Spores subglobose or broadly ellipsoid, less than twice as long as broad.
Spores scarcely longer than broad.
Spots usually marginal, almost surrounding the leaf; on Ulmaceae. 138. *P. erratica.*
Spots not usually marginal.
Spots reaching a diameter of 1 mm.
Pycnidia one to each spot; on Amygdalaceae. 139. *P. congesta.*
Pycnidia several to each spot; on Malaceae. 140. *P. arbutifolia.*
Spots reaching a diameter of 2–4 mm.
On Anacardiaceae. 141. *P. toxica.*
On Ericaceae. 142. *P. Gaultheriae.*
Spores very broadly ellipsoid, less than twice as long as broad.
Spots red; on Malaceae. 143. *P. rubra.*
Spots not red; on various hosts.
Spots 5 mm. or less in diameter.
Spots 1–2 mm. in diameter.
Pycnidia few or one to each spot; on Malaceae. 144. *P. solitaria.*
Pycnidia several to each spot; on Caesalpiniaceae. 145. *P. guanicensis.*
Spots 2–5 mm. in diameter.
On Vitaceae. 146. *P. viticola.*
On Clethraceae. 147. *P. clethricola.*
Spots reaching a diameter of 1 cm. or more.
Usually marginal or terminal.
On Cyrillaceae. 148. *P. Cyrillae.*
On Lythraceae. 149. *P. Lagerstroemiae.*
On Cornaceae. 150 *P. globifera.*
On Ericaceae.
On *Epigaea.* 151. *P. Epigaeae.*
On *Uva-ursi.* 152. *P. amicta.*
Usually not marginal nor terminal; on Anonaceae. 153. *P. Asiminae.*
Spores about twice as long as broad or more.
Spores 3 μ or more broad.
Spores containing two oil-drops.
On Caesalpiniaceae. 154. *P. Siliquastri.*
On Caprifoliaceae. 155. *P. Lantanoidis.*
Spores without conspicuous oil-drops.
Spots apparently caused by insects; on Magnoliaceae. 156. *P. liriodendrica.*
Spots apparently not caused by insects.
Spots not exceeding 5 mm. in diameter.
Diameter 4–5 mm.; on Bignoniaceae. 157. *P. Catalpae.*
Diameter 1–2 mm.
On Malaceae. 158. *P. grisea.*
On Rubiaceae. 159. *P. Cephalanthi.*
Spots reaching a diameter of 1 cm. or more.
Form circular or subcircular.
On Rutaceae. 160. *P. Hesperidearum.*

On Oleaceae. 161. *P. Chionanthi.*
Form indefinite, often covering half of the leaf.
On Grossulariaceae. 162. *P. canescens.*
On Malvaceae. 163. *P. Syriaca.*
Spores usually less than 3 μ broad, more than 1 μ.
Occurring on both leaves and fruit.
On Fabaceae. 164. *P. divergens.*
On Staphyleaceae. 165. *P Staphyleae.*
Occurring on leaves only.
Spots small, less than 1 cm. in diameter.
Usually deciduous, leaving holes in the leaves.
Spots with center only deciduous; on Amygdalaceae. 166. *P. Persicae.*
Spots wholly deciduous.
Spots medium-sized, 1–3 mm. in diameter; on Amygdalaceae. 167. *P. circumscissa.*
Spots very small; on Caprifoliaceae. 168. *P. punctata.*
Usually persistent.
On Salicaceae.
On *Populus alba.* 169. *P. Alcides.*
On other species of *Populus.* 170. *P. intermixta.*
On Fagaceae.
On *Quercus.* 171. *P. Quercus-prini.*
On *Castanea.* 172. *P. Castaneae.*
On other hosts.
Tropical species.
On Julianiaceae. 173. *P. Amphipterygii.*
On Meliaceae. 174. *P. Guareae.*
On Anacardiaceae. 175. *P. Mortoni.*
On Araliaceae. 176. *P. araliana.*
Temperate or subtropical species.
On vine, Anacardiaceae. 177. *P. rhoicola.*
On shrubs.
Subtropical, on Caesalpiniaceae. 178. *P. Parkinsoniae.*
Temperate species.
On Grossulariaceae. 179. *P. Grossulariae.*
On Rosaceae. 180. *P. variabilis.*
On Carduaceae. 181. *P. Baccharidis.*
On trees.
Subtropical species.
On Euphorbiaceae. 182. *P. Stillingiae.*
On Ebenaceae. 183. *P. biformis.*
Temperate species.
On Lauraceae. 184. *P. Sassafras.*
On Aceraceae. 185. *P. minima.*
On Tiliaceae. 186. *P. Tiliae.*
On Ericaceae. 187. *P. fimbriata.*
Spots large, 1 cm. or more in diameter.
Affecting trees.
On Fagaceae.
Spots covering entire leaf. 188. *P. agrifolia.*
Spots restricted.
On *Quercus nigra.* 189. *P. ludoviciana.*
On *Quercus virginiana.* 190. *P. virens.*
On other hosts.
Spots with concentric rings.
On Rosaceae. 191. *P. Heteromeles.*
On Malaceae. 192. *P. zonata.*
On Thymeleaceae. 193. *P. Dircae.*
Spots without concentric rings.
Sporophores very long; on Malaceae. 194. *P. innumerabilis.*
Sporophores short.
Spores with two oil-drops; on Artocarpaceae. 195. *P. moricola.*
Spores without conspicuous oil-drops.
On Junglandaceae. 196. *P. Caryae.*
On Salicaceae. 197. *P. apicalis.*
On Magnoliaceae. 198. *P. Magnoliae.*
On Lauraceae. 199. *P. micropuncta.*
On Meliaceae. 200. *P. Meliae.*
On Bixaceae. 201. *P. bixina.*
On Myrtaceae. 202. *P. extensa.*
On Vacciniaceae. 203. *P. Oxydendri.*
On Oleaceae. 204. *P. fraxinicola.*
Affecting shrubs or vines.
Tropical, in Porto Rico.
On Ulmaceae. 205. *P. momisiana.*
On Mimosaceae. 206. *P. Pithecolobii.*
Temperate or subtropical.
On Aquifoliaceae.

With two oil-drops. 207. *P. Haynaldi.*
Without oil-drops. 208. *P. concomitans.*
On Celastraceae.
Spots zonate; on *Celastrus.* 209. *P. Celastri.*
Spots not zonate; on *Euonymus.* 210. *P. Euonymi.*
On other hosts.
On Myricaceae. 211. *P. Myricae.*
On Betulaceae. 212. *P. Coryli.*
On Berberidaceae. 213. *P. mahoniaecola.*
On Malvaceae. 214. *P. altheina.*
On Araliaceae. 215. *P. hederaecola.*
On Ericaceae. 216. *P. latifolia.*

III. BACILLOSTICTEAE

On Monocotyledonous Hosts

Spores less than 2 μ broad.
Spores 0.5 × 4–5 μ; on Cyperaceae. 217. *P. caricicola.*
Spores 1–2 × 3–5 μ; on Melanthiaceae. 218. *P. melanoplaca.*
Spores 1 × 3 μ; on Convallariaceae. 219. *P. vagans.*
Spores 1–1.5 × 3–4 μ; on Smilacaceae. 220. *P. hispida.*
Spores 2 μ broad or more.
Spores 2 × 4 μ; on Typhaceae. 221. *P. typhina.*
Spores 2 × 6 μ; on Cyperaceae. 222. *P. Caricis.*
Spores 2.5 × 4 μ; on Araceae. 223. *P. Xanthosomatis.*

On Dicotyledonous Hosts

On Herbaceous Hosts

Spores laterally flattened; on Scrophulariaceae. 224. *P. Maurandiae.*
Spores not laterally flattened.
Spores usually 2 μ or more broad.
Spots irregular or indefinite in form.
On Oxalidaceae. 225. *P. Oxalidis.*
On Ammiaceae.
On *Heracleum.* 226. *P. Heraclei.*
On *Apium.* 227. *P. Apii.*
On Cichoriaceae. 228. *P. Mulgedii.*
On Carduaceae. 229. *P. eupatoriicola.*
Spots circular or subcircular in form.
Spots deciduous, leaving holes or notches in the leaves.
Spots marginal for the most part; on Ranunculaceae. 230. *P. Clematidis.*
Spots not marginal.
On Solanaceae. 231. *P. perforans.*
On various other hosts. 232. *P. decidua.*
Spots not usually deciduous.
Spots reaching a diameter of 7–10 mm.; on Brassicaceae. 233. *P. brassicicola.*
Spots not usually exceeding 3 or rarely 5 mm.
Spores 2–2.5 × 3–7 μ; on Malvaceae. 234. *P. gossypina.*
Spores 2–3 × 4–5 μ; on Carduaceae. 235. *P. Chrysanthemi.*
Spores usually less than 2 μ broad, rod-like or bacterioid.
Spots circular or subcircular in form.
Spores allantoid.
On Chenopodiaceae. 236. *P. ambrosioides.*
On Brassicaceae. 237. *P. allantospora.*
Spores not allantoid.
Spots reaching a diameter of 1 cm.; on Carduaceae. 238. *P. Garrettii.*
Spots not usually exceeding a diameter of 2–3 mm.
Spots translucent, deciduous; on Geraniaceae. 239. *P. Geranii.*
Spots not translucent nor usually deciduous.
On Petiveriaceae. 240. *P. Phytolaccae.*
On Melastomataceae. 241. *P. Rhexiae.*
On Lamiaceae. 242. *P. palustris.*
On Carduaceae. 243. *P. Acanthospermi.*
Spots indefinite or angular in form.
Spots small, not usually exceeding 5 mm. in diameter.
Spots indefinite; on Ranunculaceae. 244. *P. anemonicola.*
Spots angular, bounded by the veinlets of the leaves.
Spots persistent.
Spots becoming blackish; on Asclepiadaceae. 245. *P. Cornuti.*
Spots brown or whitish.
On Fabaceae. 246. *P. Desmodii.*
On Lamiaceae. 247. *P. Brunellae.*
Spots deciduous; on Lamiaceae. 248. *P. Collinsoniae.*
Spots large, 1 cm. or more in diameter.
Spores 1 × 3–4 μ.
On Ranunculaceae. 249. *P. Delphinii.*
On Carduaceae. 250. *P. Arnicae.*

Spores 1–2 × 3–4 μ.
Spots finally covering nearly half of the leaf; on Rosaceae. 251. *P. fragaricola.*
Spots reaching a diameter of 1 cm. or more.
On Rosaceae. 252. *P. Dearnessii.*
On Scrophulariaceae. 253. *P. verbascicola.*
Spots terminal; on Rubiaceae. 254. *P. Richardsoniae.*
Spots affecting most or all of the leaf.
On Fabaceae.
On *Lupinus.* 255. *P. ferax.*
On *Astragalus.* 256. *P. Astragali.*
Not on Fabaceae.
Spots yellowish; on Adoxaceae. 257. *P. Adoxae.*
Spots becoming blackish; on Cichoriaceae. 258. *P. eximia.*
Spores imperfectly developed.
On Menispermaceae. 259. *P. abortiva.*
On Solanaceae. 260. *P. Nicotiana.*

ON WOODY HOSTS; TREES, SHRUBS, OR VINES

Affecting trees.
On Fagaceae.
Spores 2 × 4 μ. 261. *P. Quercus-Ilicis.*
Spores 1–1.5 × 2.5–5 μ.
Spores twice as long as broad; on *Quercus.* 262. *P. vesicatoria.*
Spores about three times as long as broad.
On *Quercus.* 263. *P. livida.*
On *Castanopsis.* 264. *P. castanicola.*
On Ulmaceae.
Spores 1 × 3–4 μ, on *Ulmus fulva.* 265. *P. confertissima.*
Spores 1–2.5 × 3–4.5 μ.
On *Ulmus.* 266. *P. melaleuca.*
On *Celtis.* 267. *P. Celtidis.*
On Artocarpaceae. 268. *P. consors.*
On Malaceae.
On *Malus.*
Spores hyaline. 269. *P. clypeata.*
Spores slightly smoky. 270. *P. limitata.*
On *Amelanchier.* 271. *P. paupercula.*
On *Crataegus.* 272. *P. Crataegi.*
On other hosts.
Spores 1 μ or less broad.
Length of spores not more than 2 μ.
On Junglandaceae. 273. *P. convexula.*
On Fabaceae. 274. *P. erythrinicola.*
On Aceraceae. 275. *P. minutissima.*
On Cornaceae. 276. *P. Starbaeckii.*
Length of spores 4–5 μ.
On Salicaceae. 277. *P. brunnea.*
On Magnoliaceae. 278. *P. glauca.*
On Platanaceae. 279. *P. Platani.*
On Malaceae and Amygdalaceae. 280. *P. virginiana.*
On Oleaceae. 281. *P. viridis.*
Spores more than 1 μ broad.
Spots circular or subcircular, internal.
On Betulaceae. 282. *P. Betulae.*
On Polygonaceae. 283. *P. Coccolobae.*
On Cornaceae. 284. *P. Nyssae.*
On Caprifoliaceae. 285. *P. Lentaginis.*
Spots terminal, marginal or indefinite; on Aesculaceae. 286. *P. aesculicola.*
Affecting shrubs or vines.
On Ericaceae.
Spores 1 × 2–3 μ; *on Kalmia.* 287. *P. kalmicola.*
Spores 1–2 × 3.5–5 μ.
On *Rhododendron.* 288. *P. Saccardoi.*
On *Oxycoccus.* 289. *P. putrefaciens.*
On other hosts.
Spores 1 μ or less broad.
On Lauraceae. 290. *P. Linderae.*
On Fabaceae. 291. *P. Sophora.*
On Anacardiaceae. 292. *P. Toxicodendri.*
On Vitaceae. 293. *P. spermoides.*
Spores more than 1 μ broad.
Spots indefinite in form.
On Aquifoliaceae. 294. *P. opaca.*
On Caprifoliaceae. 295. *P. Diervillae.*
Spots circular or subcircular in form.
On Betulaceae. 296. *P. corylaria.*
On Annonaceae. 297. *P. Xylopiae.*
On Saxifragaceae. 298. *P. Deutziae.*
On Sterculiaceae. 299. *P. borinquensis.*
On Oleaceae. 300. *P. discincola.*

1. **Phyllosticta Convallariae** Pers. Champ. Comest. 148. 1818.

Sphaeria lichenoides convallariaecola DC. Fl. Fr. **6**: 148. 1815.
Sphaeria cruenta Fries, Syst. Myc. **2**: 531. 1823.
Depazea cruenta Chev. Fl. Paris **1**: 452. 1826.
Sphaeria convallariaecola Duby, Bot. Gall. **2**: 712. 1830.
Phyllosticta cruenta Kickx, f. Fl. Crypt. Fland. **1**: 412. 1867.
Phyllosticta pallidior Peck, Bull. N. Y. State Mus. 105: 26. 1906.
Macrophoma cruenta Ferraris; Ferraris & Massa, Ann. Myc. **10**: 288. 1912.

Spots subcircular or slightly elongate, reaching a diameter of 1 cm., or occasionally two or three coalescing giving rise to a compound spot which is irregular in form and much larger, at first almost blood-red, fading in the center to whitish or pinkish, the margin remaining very dark-red or reddish-purple or almost black; pycnidia numerous and closely crowded near the center of the infected area, about equally conspicuous on either side of the leaf, reaching a diameter of 150–200 μ; spores subglobose to broad-ellipsoid, densely filled with a granular matter, about 8 × 10–12 μ.

ON CONVALLARIACEAE:
Polygonatum biflorum (Walt.) Ell., New York, Wisconsin.
Polygonatum commutatum (R. & S.) A. Dietr., Wisconsin.
Polygonatum sp., Missouri ?
Vagnera racemosa (L.) Morong (*Convallaria racemosa* L., *Smilacina racemosa* Desf.), Alabama, Idaho, Indiana, Iowa, Massachusetts, New Jersey, New York, Pennsylvania, Wisconsin.
Vagnera stellata (L.) Morong (*Convallaria stellata* L., *Smilacina stellata* Desf.) North Dakota; Ontario.
TYPE LOCALITY: Europe.
DISTRIBUTION: Ontario to Idaho and Alabama; also in Europe.
ILLUSTRATIONS: Ann. Sci. Nat. VI, **7**: *pl. 2, f. 7;* Roum. Crypt. Ill. Champ., *pl. 17, f. 359.*
EXSICCATI: Ellis, N. Am. Fungi *752;* Ellis & Ev. Fungi Columb. *1336;* Barth, Fungi Columb. *4652;* Brenckle, Fungi Dak. *287.*

2. **Phyllosticta Dioscoreae** Cooke, Grevillea **6**: 136. 1878.

Septoria Dioscoreae Cooke, Hedwigia **17**: 38. 1878.

Spots circular or subcircular in form, at first brownish, finally becoming whitish in the center, surrounded by a dark-brown, slightly elevated rim, similar on both sides of the leaf but less distinct on the under surface, reaching a diameter of 5 mm. or rarely 1 cm.; pycnidia sparingly scattered over the infected spot, visible on both sides of the leaf, reaching a diameter of 120 μ; spores rather large, subglobose to ellipsoid, about 6 × 8–10 μ (according to Cook 3 × 8–10 μ).

ON DIOSCOREACEAE:
Dioscorea villosa L., South Carolina, West Virginia.
TYPE LOCALITY: South Carolina, on *Dioscorea villosa.*
DISTRIBUTION: West Virginia and South Carolina.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3255;* Ellis & Ev. Fungi Columb. *1445.*

3. **Phyllosticta commelinicola** E. Young, Mycologia **7**: 144. 1915.

Spots indefinite, diffused, giving the leaf a yellowish and dead appearance; pycnidia numerous, subepidermal, restricted to the upper side of the leaf, light-brown, reaching a diameter of 90–168 μ, with a distinct dark-bordered ostiolum which reaches a diameter of 24–48 μ; spores ovoid, about 4–5 × 9–14 μ.

ON COMMELINACEAE:
Commelina nudiflora L., Porto Rico.
TYPE LOCALITY: Hormigueros, Porto Rico, on *Commelina nudiflora.*
DISTRIBUTION: Known only from the type locality.

4. **Phyllosticta Aplectri** Ellis & Ev. Proc. Acad. Phila. **1894**: 356. 1894.

Spots indefinite, consisting of a dead area which blends off into the healthy tissue of the leaf, about equally visible on either side of the leaf, reaching a diameter of 1 cm.; pycnidia rather numerous, gregarious, prominent, black, reaching a diameter of 75–90 μ; spores large, subglobose to ellipsoid, densely filled with small granules, usually about 5 × 10 μ.

ON ORCHIDACEAE:
Aplectrum hyemale (Muhl.) Torr. (*A. spicatum* B. S. P.), Delaware.
TYPE LOCALITY: Naaman's Creek, Delaware, on *Aplectrum spicatum.*
DISTRIBUTION: Delaware.

5. **Phyllosticta Oakesiae** Dearness & House; House, Bull. N. Y. State Mus. 179: 30. 1915.

Spots colorless, translucent, surrounded by an indistinct border from which a reddish stain extends into the healthy tissues of the leaf, reaching a diameter of 5 mm. to 1 cm.; pycnidia dark-brown, occurring on the upper side of the leaf but visible also from beneath, reaching a diameter of 100 to 200 μ; spores hyaline, with oil-drops, ellipsoid to fusoid, 5–7 $\times$ 9–22 μ.

On CONVALLARIACEAE:
Uvularia sessilifolia L. (*Oakesia sessilifolia* S. Wats.), New York.
TYPE LOCALITY: Karner, Albany County, New York, on *Oakesia sessilifolia*.
DISTRIBUTION: Known only from the type locality.

6. **Phyllosticta Gladioli** Ellis & Ev. N. Am. Phyllost. 73. 1900.

? *Sphaeropsis Gladioli* Cooke, Grevillea 12: 23. 1883.
? *Phoma Gladioli* Sacc. Syll. Fung. 3: 159. 1884.

Spots yellowish or brownish, indefinite in outline, the dead tissue gradually blending off into the healthy tissues of the leaf, finally covering the entire end and often a large portion of the leaf, equally visible on either side; pycnidia numerous, thickly scattered over the older portions of the infected areas, occurring on both sides of the leaf, immersed and causing minute raised blisters, becoming partially erumpent, reaching a diameter of 200–300 μ; spores ellipsoid or subfusoid, granular within, 6–7 $\times$ 14–20 μ.

On IRIDACEAE:
Gladiolus communis L., Alabama.
TYPE LOCALITY: Alabama, on *Gladiolus communis*.
DISTRIBUTION: Alabama (and South Carolina?).

7. **Phyllosticta Hymenocallidis** Seaver, sp. nov.

Spots at first circular or subcircular in form, blood-red, spreading, the color fading, finally killing a large portion of the leaf, the red color then confined to the margins of the infected areas, the whole leaf-surface becoming abnormally crumpled and contorted; pycnidia very numerous and quite evenly distributed over the dead areas and occurring on both sides of the leaf, reaching a diameter of 100–125 μ, immersed or subimmersed but rather conspicuous; spores very numerous, ellipsoid or short-cylindric, densely filled with a granular contents, about 4 $\times$ 15 μ.

On AMARYLLIDACEAE:
Hymenocallis sp., Bermuda, Great Bahama.
? *Amaryllis purpurea* Ait., Louisiana.
Type collected in Bermuda, on *Hymenocallis* sp., November 29-December 14, 1912, by Stewardson Brown, N. L. Britton & Fred J. Seaver.
DISTRIBUTION: Louisiana; Bermuda; Bahamas.

8. **Phyllosticta Palmetto** Ellis & Ev. Jour. Myc. 5: 146. 1889.

Spots subellipsoid, pale-yellowish, with a slightly darker border which gradually blends off into the healthy tissue of the leaf, similar in appearance on both sides of the leaf, reaching a diameter of 5 mm.; pycnidia scattered over the infected spot, on either side of the leaf, reaching a diameter of 110–150 μ; spores cylindric or subcylindric, each usually containing two oil-drops, reaching a length of 12–14 μ and a diameter of 2.5–3 μ.

Thought to be the pycnidial stage of *Sphaerella sabaligena* Ellis & Ev.

On ARECACEAE:
Sabal Palmetto (Walt.) R. & S., Louisiana, Mississippi.
TYPE LOCALITY: Mississippi, on *Sabal Palmetto*.
DISTRIBUTION: Louisiana and Mississippi.

9. **Phyllosticta Trillii** Ellis & Ev. Proc. Acad. Phila. 1895: 430. 1895.

Spots small, circular or subcircular, dirty-brown, with a grayish center and a dark border surrounded by a yellowish area, reaching a diameter of 3–4 mm.; pycnidia occurring on the upper side of the leaf, subglobose, reaching a diameter of 750 μ; spores ellipsoid or subcylindric, hyaline, 2–2.5 $\times$ 10–14 μ.

Associated with *Cladosporium Trillii* Ellis & Ev.
ON TRILLIACEAE:
Trillium petiolatum Pursh, Washington.
Trillium erectum L., New York.
TYPE LOCALITY: Pullman, Washington, on *Trillium petiolatum.*
DISTRIBUTION: New York and Washington.

10. **Phyllosticta Medeolae** Dearness & House; House, Bull. N. Y. State Mus. 179: 29. 1915.

Spots reddish or grayish-red, terminal and often gradually spreading until they cover half of the leaf-surface; pycnidia black, occurring on the upper side of the leaf, scattered over the infected area, reaching a diameter of 100 μ; spores hyaline, sometimes containing two oil-drops, elongate, 2–3 $\times$ 12–15 μ.

ON TRILLIACEAE:
Medeola virginiana L., New York.
TYPE LOCALITY: Near Albany, New York, on *Medeola virginiana.*
DISTRIBUTION: Known only from the type locality.

11. **Phyllosticta Iridis** Ellis & Martin; Ellis & Ev. Proc. Acad. Phila. **1893**: 456. 1894.

Spots at first small, elongate or irregular in outline and with no distinct border, scattered over the surface of the leaf, purplish, the whole leaf-tip and sides finally becoming reddish-brown and dead, the original spot becoming still darker and often blackish; pycnidia in groups of 4–6 each on the original spots, subimmersed and not very conspicuous, visible on both sides of the leaf; spores numerous, narrow-ellipsoid, or subcylindric, 2–2.5 $\times$ 10–12 μ.

ON IRIDACEAE:
Iris versicolor L., Florida, Michigan, New York, Ohio.
TYPE LOCALITY: Ann Arbor, Michigan, on *Iris versicolor.*
DISTRIBUTION: New York to Michigan and Florida.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2937;* Barth. Fungi Columb. *2949;* Kellerm. Ohio Fungi *190.*

12. **Phyllosticta concava** Seaver, sp. nov.

Spots very variable in size, often reaching a diameter of several cm., cinereous or blackish the infected area much depressed and concave, with a strongly elevated rim, similar in appearance on both sides of the leaf-like stem, the infected tissue becoming very thin and often breaking out; pycnidia numerous, thickly scattered over the infected spot, reaching a diameter of 150–200 μ; spores minute ellipsoid or rod-like, about 1–1.5 $\times$ 4 μ.

Causing large dead spots similar to those of *Sphaerella Opuntiae* Ellis & Ev.

ON CACTACEAE:
Opuntia sp., Bermuda.
Type collected in Bermuda by Stewardson Brown, N. L. Britton, and Fred J. Seaver, November 29–December 14, 1912 (reported erroneously, Mem. N. Y. Bot. Gard. **6**: 509, as *P. Opuntiae* Sacc. & Speg.)

13. **Phyllosticta Raui** (Peck) Dearness & House; House, Bull. N. Y. State Mus. 179: 36. 1915.

Sphaeropsis Raui Peck, Bot. Gaz. **3**: 34. 1878.
Phoma Raui Sacc. Syll. Fung. **3**: 143. 1884.
Macrophoma Raui Berl. & Vogl. Atti. Soc. Venet. Trent. **10**: 188. 1887.

Spots suborbicular, reaching a diameter of 1–2 mm., yellow; pycnidia numerous, gregarious, minute, black, reaching a diameter of 150–170 μ; spores ellipsoid, 16–20 μ long.

ON CARDUACEAE:
Artemisia scopulorum A. Gray, Colorado.
TYPE LOCALITY: Colorado, on *Artemisia scopulorum.*
DISTRIBUTION: Known only from the type locality.

14. **Phyllosticta Rudbeckiae** Ellis & Ev. Proc. Acad. Phila. **1895**: 430. 1895.

? *Phoma Rudbeckiae* Fairman, Proc. Rochester Acad. Sci. **1**: 51. 1890.

Spots nearly black, irregular, subellipsoid or subcircular, reaching a diameter of 5–7.5 mm., definite in outline, with a border darker than the center; pycnidia occurring on the upper side of the leaf, scattered, black, small, prominent; spores subcylindric, hyaline, straight or slightly curved, 2–2.5 × 8–12 μ.

ON CARDUACEAE:
Rudbeckia laciniata L., New York (?), Wisconsin.
TYPE LOCALITY: Kenosha County, Wisconsin, on *Rudbeckia laciniata*.
DISTRIBUTION: New York (?) and Wisconsin.

15. **Phyllosticta gallicola** Ellis & Ev. Bull. Torrey Club **24**: 285. 1897.

Spots circular or subcircular in form, reaching a diameter of 5 mm., sometimes two or three coalescing and becoming irregular, the spot consisting of an insect gall, the tissues becoming thickened and convex, yellowish-brown, darker with age; pycnidia numerous, scattered over the infected spot, occurring on either side of the leaf, reaching a diameter of 150 μ; spores numerous, hyaline or faintly colored, 6 × 10–12 μ.

ON CARDUACEAE:
Solidago missouriensis Nutt., Colorado.
Solidago sp., Colorado.
TYPE LOCALITY: Colorado, on *Solidago* sp.
DISTRIBUTION: Colorado.

16. **Phyllosticta sphaeropsispora** Ellis & Ev. Bull. Torrey Club **24**: 286. 1897.

Spots subcircular or irregular in form, white or whitish, surrounded by a slightly elevated, narrow, brown border, the surrounding tissue slightly discolored, reaching a diameter of 3 mm. to 1 cm., about equally visible on either side of the leaf; pycnidia numerous, scattered over the infected spot, reaching a diameter of 100–150 μ; spores ellipsoid, 6–7 × 13–16 μ, on a pedicel about 15 μ long.

ON CARDUACEAE:
Solidago confinis A. Gray, California.
TYPE LOCALITY: Pasadena, California, on *Solidago confinis*.
DISTRIBUTION: Known only from the type locality.

17. **Phyllosticta similispora** Ellis & Davis; Ellis & Ev. Bull. Torrey Club **27**: 572. 1900.

? *Leptothyrium tumidulum* Sacc. Ann. Myc. **10**: 312. 1912.

Spots rather irregular, small, indefinite in outline, reaching a diameter of 1–3 mm., dark-brown or blackish with a purplish margin; pycnidia sparingly scattered, depressed-globose, reaching a diameter of 100–150 μ; spores ellipsoid or almond-shaped, 5–6 × 10–15 μ.

ON CARDUACEAE:
Solidago rigida L., Wisconsin.
TYPE LOCALITY: Racine, Wisconsin, on *Solidago rigida*.
DISTRIBUTION: Wisconsin; Ontario (?)

18. **Phyllosticta Liatridis** Davis, Trans. Wis. Acad. **18**: 87. 1915.

Spots circular or subcircular, white or sordid, dry, reaching a diameter of 1–2 mm., usually surrounded by a broad black border; pycnidia occurring on the upper side of the leaf, prominent, black, reaching a diameter of 65 μ; spores hyaline, containing 2–4 oil-drops, 4 × 10 μ.

ON CARDUACEAE:
Lacinaria spicata (L.) Kuntze (*Liatris spicata* L.), Wisconsin.
TYPE LOCALITY: Gaslyn, Burnett County, Wisconsin, on *Liatris spicata*.
DISTRIBUTION: Known only from the type locality.

19. **Phyllosticta astericola** Ellis & Ev. Proc. Acad. Phila. **1893**: 157. 1893.

Spots subcircular or more often irregular in form, yellowish-brown, a little paler in the center, the main spot surrounded by a pale-yellowish area, reaching a diameter of 2–5 mm., visible on the under side of the leaf as a pale-yellowish spot; pycnidia rather large, black, quite evenly scattered over the infected area, reaching a diameter of 150–200 μ; spores abundant, fusoid or almond-shaped, 4–5 × 8–12 μ, granular within.

ON CARDUACEAE:
Doellingeria umbellata (Mill.) Nees (*Aster umbellatus* Mill.), Wisconsin.
TYPE LOCALITY: Kenosha County, Wisconsin, on *Aster umbellatus*.
DISTRIBUTION: Known only from the type locality.

20. **Phyllosticta Apocyni** Trel. Prel. List Fungi Wis. 17. N 1884.

Phyllosticta Apocyni Ellis & Martin, Am. Nat. **18**: 1264. D 1884.

Spots nearly circular in form, brown or yellowish-brown, becoming whitish with age, surrounded by a very narrow, blackish, slightly elevated border, reaching a diameter of 2–3 mm., visible on both sides of the leaf but more distinct on the upper surface; pycnidia few, scattered over the infected spot, black, reaching a diameter of 75–100 μ, restricted to the upper side of the leaf; spores large, rather variable in form, ellipsoid, ovoid, pyriform, or subglobose, usually about 6–7 × 10 μ, granular within.

ON APOCYNACEAE:
Apocynum androsaemifolium L., New York.
Apocynum cannabinum L., New Jersey, Wisconsin.
TYPE LOCALITY: LaCrosse, Wisconsin, on *Apocynum cannabinum*.
DISTRIBUTION: New York and New Jersey to Wisconsin.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2678;* Ellis & Ev. Fungi Columb. *361, 565*.

21. **Phyllosticta obscurans** (Ellis & Ev.) F. Tassi, Bull. Lab. Bot. Siena **5**: 13. 1902.

Phoma obscurans Ellis & Ev. Proc. Acad. Phila. 1894: 357. 1894.

Spots with a ferruginous center and a broad purple border, paler on the under side of the leaf, reaching a diameter of 5–8 mm.; pycnidia few, scattered, prominent; spores ellipsoid, containing two oil-drops, 1.5–2 × 4.5–5.5 μ; sporophores simple, lanceolate-fusoid, 1.5 × 8–12μ.

ON ROSACEAE:
Fragaria sp., New Jersey, West Virginia.
TYPE LOCALITY: Nuttallburg, West Virginia, on *Fragaria* sp.
DISTRIBUTION: New Jersey to West Virginia.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3258*.

22. **Phyllosticta Solani** Ellis & Martin, Am. Nat. **16**: 1002. 1882.

Spots circular or subcircular, pale yellowish-brown, surrounded by a very narrow dark border outside of which is a yellowish area which gradually blends off into the healthy tissue of the leaf, reaching a diameter of 5 mm. to 1 cm., paler on the under side of the leaf; pycnidia rather thickly scattered over the infected spot, reaching a diameter of 90 μ; spores numerous, ellipsoid, 2–2.5 × 9–18 μ.

ON SOLANACEAE:
Solanum carolinense L., Kentucky.
Solanum Melongena L. (cult.), Louisiana.
TYPE LOCALITY: Lexington, Kentucky, on *Solanum* sp.
DISTRIBUTION: Kentucky to Louisiana.

23. **Phyllosticta Amaranthi** Ellis & Kellerm. Jour. Myc. **1**: 4. 1885.

Spots circular or subcircular in form, dark-brown, with a slightly elevated reddish-purple border, becoming paler near the center and sometimes whitish, about equally visible on both sides of the leaf, reaching a diameter of 1–3 mm.; pycnidia scattered over the spot, usually

only on the upper side of the leaf but occasionally on the under side also; spores ellipsoid or slightly narrower at one end, usually containing two small oil-drops, 3–5 × 10–12 μ.

ON AMARANTHACEAE:
Amaranthus retroflexus L., Alabama, Kansas.
TYPE LOCALITY: Garden City, Kansas, on *Amaranthus retroflexus*.
DISTRIBUTION: Kansas to Alabama; also in Europe.

24. **Phyllosticta Silenes** Peck, Ann. Rep. N. Y. State Mus. **43**: 72. 1890.

Spots large, sometimes occupying half the surface of the leaf, pallid; pycnidia occurring on both sides of the leaf or only on the under side, minute, prominent, black; spores ellipsoid, 3.5–5 × 10–12 μ.

ON CARYOPHYLLACEAE:
Silene antirrhina L., New York.
TYPE LOCALITY: Copake Iron Works, Columbia County, New York, on *Silene antirrhina*.
DISTRIBUTION: Known only from the type locality.

25. **Phyllosticta citrullina** Chester, Bull. Torrey Club **18**: 374. 1891.

Ascochyta citrullina C. O. Smith, Bull. Del. Exp. Sta. 70: 7. 1905.
Diplodina citrullina Grossenb. Tech. Bull. N. Y. Exp. Sta. 9: 226. 1909.

Spots circular or irregular, black, concentrically ringed, becoming confluent; pycnidia brown, immersed, scarcely erumpent, lenticular, reaching a diameter of 75–130 μ; spores ellipsoid, straight or slightly curved, 3.5 × 10 μ, occasionally 1-septate.

Thought to be the pycnidial stage of *Mycosphaerella citrullina* (C. O. Smith) Grossenb. Tech. Bull. N. Y. Exp. Sta. 9: 226. 1909 (*Sphaerella citrulina* C. O. Smith), but connection not proven.

ON CUCURBITACEAE:
Citrullus Citrullus (L.) Karst. (*Citrullus vulgaris* Schrad.) (cult.), Delaware.
TYPE LOCALITY: Newark, Delaware, on *Citrullus vulgaris*.
DISTRIBUTION: New York and Delaware.
ILLUSTRATIONS: Bull. Del. Exp. Sta. 70: *f. 1, 3; pl. 1.*

26. **Phyllosticta Galactis** (Cooke) Ellis & Ev.; Millsp. & Nutt. Field Mus. Publ. Bot. **1**: 103. 1896.

Phoma Galactis Cooke, Grevillea **14**:90. 1886.

Spots irregular, forming brown patches which partially surround the leaf extending inward, often covering half the surface of the leaf, indefinite in outline; pycnidia scattered over the surface of the infected spot, mostly on the upper surface, minute, reaching a diameter of 50–80 μ; spores scant, 4 × 12–15 μ.

ON DIAPENSIACEAE:
Galax aphylla L. West Virginia.
TYPE LOCALITY: West Virginia, on *Galax aphylla*.
DISTRIBUTION: West Virginia; also in Europe.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3153*.

27. **Phyllosticta spinosa** Ellis & Kellerm. Jour. Myc. **3**: 102. 1887.

Spots usually circular or subcircular, white or whitish, with a very narrow dark-brown or purplish, definite border, reaching a diameter of 2–3 mm., the spots slightly visible on the under side of the leaf and covered with tufts of brown sterile hyphae; pycnidia usually gregarious near the center of the spot; spores ellipsoid, often containing two oil-drops, 3–5 × 12–14 μ.

ON MALVACEAE:
Sida spinosa L., Kansas.
TYPE LOCALITY: Manhattan, Kansas, on *Sida spinosa*.
DISTRIBUTION: Known only from the type locality.

28. **Phyllosticta Humuli** Sacc. & Speg.; Sacc. Michelia **1**: 144. 1878.

Phyllosticta Humuli major Ellis & Ev. Jour. Myc. **5**: 145. 1889.

Spots circular or subcircular, yellowish or whitish, surrounded by a very narrow, slightly elevated rim, reaching a diameter of 2–3 mm., about equally visible on either side of the leaf; pycnidia scattered over the infected spot, yellowish, reaching a diameter of 80–90 μ; spores rather large, subcylindric, variable in size and form but usually about 3–5 $\times$ 12–16 μ.

ON CANNABINACEAE:
Humulus Lupulus L., Iowa.
TYPE LOCALITY: Italy, on *Humulus Lupulus*.
DISTRIBUTION: Iowa; also in Europe.

29. **Phyllosticta tuberosa** Ellis & Martin; Martin, Jour. Myc. **2**: 26. 1886.

Spots subcircular in form, pale-yellow or whitish in the center, surrounded by a slightly elevated circumscribing line or occasionally with several concentric lines, reaching a diameter of 2–3 mm., about equally visible on either side of the leaf; pycnidia sparingly scattered over the infected spot, mainly on the upper side, reaching a diameter of 180 μ; spores ellipsoid or fusoid, 4–6 $\times$ 12–18 μ, often containing several oil-drops.

ON ASCLEPIADACEAE:
Asclepias tuberosa L., New Jersey.
Asclepias incarnata L., Delaware.
?*Asclepias variegata* L., New Jersey.
TYPE LOCALITY: New Jersey, on *Asclepias tuberosa*.
DISTRIBUTION: New Jersey and Delaware.
EXSICCATI: Ellis, N. Am. Fungi *1161*.

30. **Phyllosticta phomiformis** Sacc. Michelia **2**: 573. 1882.

? *Phyllosticta Quercus-rubrae* W. Gerard, Bull. Torrey Club 6: 78 1876. (Host erroneously determined as *Quercus rubra*.)

Spots circular or subcircular in form, or slightly irregular, pale-yellowish in the center, with a dark reddish-brown area around the outside, reaching a diameter of 3–4 mm., visible on both sides of the leaf but uniformly pale-yellow on the under side; pycnidia rather thickly scattered over the lighter portion of the spot, reaching a diameter of 150 μ; spores large, ellipsoid or subfusoid, straight or slightly curved, reaching a length of 18–22 μ and a diameter of 6–8 μ.

ON FAGACEAE:
Quercus alba L., Massachusetts, New Jersey, Pennsylvania, Wisconsin; Ontario.
Quercus macrocarpa Michx., Connecticut.
Quercus Prinus L., Kansas.
Quercus stellata Wang. (*Quercus obtusiloba* Michx.), Florida, Missouri, New Jersey.
Quercus sp., Massachusetts, New York, Pennsylvania.
TYPE LOCALITY: Pennsylvania, on *Quercus alba*.
DISTRIBUTION: Massachusetts to Wisconsin, Kansas, and Florida.
EXSICCATI: Ellis N. Am. Fungi *1160;* Ellis & Ev. Fungi Columb. *274;* Seym. & Earle, Econ. Fungi *181*.

31. **Phyllosticta maxima** Ellis & Ev. Jour. Myc. **4**: 123. 1888.

?*Phyllosticta Rhododendri* Westend. Bull. Acad. Belg. **18**^{2}: 399. 1851.

Spots large, irregular or semicircular in form, usually occurring on the margin or on the end of the leaf, often reaching a length of 4–5 cm., reddish-brown and distinctly marked with reddish zones, whitish near the center, visible on both sides of the leaf; pycnidia rather sparingly scattered over the infected spot, more abundant on the upper surface but sometimes occurring on both, reaching a diameter of 120–150 μ; spores rather large, ellipsoid or subfusoid, 5–7 $\times$ 15–20 μ.

ON ERICACEAE:
Rhododendron catawbiense Pursh, New Jersey.
Rhododendron maximum L., Massachusetts.
TYPE LOCALITY: Bedford, Massachusetts, on *Rhododendron maximum*.
DISTRIBUTION: Massachusetts, New Jersey, and Pennsylvania; also reported on *Rhododendron nudiflorum*? from Alabama.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2765*.

32. **Phyllosticta Nerii** Westend.; Kickx f. Fl. Crypt. Fland. 1: 418. 1867.

Spots internal or terminal, when internal circular or ellipsoid, when terminal often covering a third or a half of the leaf-surface, whitish or cinereous, visible on the under side of the leaf but less distinct, surrounded or partially surrounded by a slightly elevated brownish or blackish border; pycnidia numerous, thickly scattered over the infected spot, reaching a diameter of 150–200 μ; spores large, ellipsoid or subfusoid, reaching a length of 15–18 μ and a diameter of 4–6 μ.

ON APOCYNACEAE:
Nerium Oleander L., Florida, Lousiana, Michigan.
TYPE LOCALITY: Europe, on *Nerium Oleander*.
DISTRIBUTION: Michigan to Florida and Louisiana; also in Europe.

33. **Phyllosticta terminalis** Ellis & Martin, Am. Nat. **18:** 70. 1884.

Phyllosticta Leucothoes Ellis & Martin, Am. Nat. **18**: 1264. 1884.

Spots terminal or marginal, at first brown, often becoming whitish, reaching a diameter of 1 cm., the infected area usually separated from the healthy tissue of the leaf by a dark-purplish or blackish border; pycnidia scattered over the infected spot, restricted to the upper side of the leaf, rather prominent, reaching a diameter of 100–120 μ; spores numerous, ellipsoid or fusoid, 6–7 × 15–20 μ.

ON MAGNOLIACEAE:
Magnolia sp., New Jersey.
ON AQUIFOLIACEAE:
Ilex Cassine L. (*Ilex Dahoon* Walt.), Florida.
ON ERICACEAE:
Leucothoe acuminata (Ait.) D. Don, Florida.
ON OLEACEAE:
Forsythia sp. (cult.), New Jersey.
Osmanthus americana (L.) B. & H. (*Olea americana* L.), Florida.
TYPE LOCALITY: Florida, on *Ilex Dahoon*.
DISTRIBUTION: New Jersey and Florida.
EXSICCATI: Ellis, N. Am. Fungi *1167;* Ellis & Ev. Fungi Columb. *1339*.

34. **Phyllosticta Roberti** Boyer & Jacz. Bull. Soc. Bot. Fr. 40: ccxc. 1894.

Spots large, whitish or pale-yellowish in the center, surrounded with alternating light and dark concentric bands, reaching a diameter of 2.5 cm., the markings similar on the under side of the leaf but paler; pycnidia scattered over the infected spot, erumpent, reaching a diameter of 200 μ; spores long-ellipsoid or subcylindric, 4–5 × 12–20 μ.

ON ARTOCARPACEAE:
Ficus elastica Roxb. (cult.), Florida.
TYPE LOCALITY: Europe, on *Ficus elastica*.
DISTRIBUTION Florida; West Indies; also in Europe.

35. **Phyllosticta Halstedii** Ellis & Ev. Jour. Myc. **5:** 146. 1889.

Spots circular or subcircular in form, reddish-brown, becoming whitish in the center surrounded by numerous faint concentric rings, reaching a diameter of 1 cm., paler on the under side of the leaf; pycnidia sparingly scattered over the infected spot, on either side of the leaf but more numerous on the upper, reaching a diameter of 100–150 μ; spores fusoid-ellipsoid, 5–7 × 15–20 μ.

ON OLEACEAE:
Syringa vulgaris L., New Jersey.
TYPE LOCALITY: New Brunswick, New Jersey, on *Syringa vulgaris*.
DISTRIBUTION: Known only from the type locality.

36. **Phyllosticta Ellisii** Sacc. & Syd. in Sacc. Syll. Fung. 14: 851. 1899.

Phyllosticta Ribis Ellis & Ev.; Millsp. & Nutt. Field Mus. Publ. Bot. 1: 102. 1896. Not *P. Ribis* Speg. 1887.

Spots rather large, irregular, rusty-brown, more or less indefinite in outline, reaching

a diameter of 1 cm., visible on both sides of the leaf but paler on the under side; pycnidia rather sparingly scattered over the infected spot, reaching a diameter of 150–200 μ; spores ellispoid or fusoid, about 6–9 × 15–22 μ.

ON GROSSULARIACEAE:
Ribes sp., West Virginia.
TYPE LOCALITY: Fayette County, West Virginia, on *Ribes* sp.
DISTRIBUTION: Known only from the type locality.

37. **Phyllosticta cercidicola** Ellis & Ev.; Millsp. & Nutt. Field Mus. Publ. Bot. 1: 105. 1896.

Spots circular or subcircular, definite in outline, reddish-brown, usually surrounded by a dark-brown, narrow border, reaching a diameter of 1 cm. about equally visible on either side of the leaf; pycnidia mostly on the upper side of the leaf, reaching a diameter of 110–150 μ; spores numerous, large, fusiform, smooth or very minutely roughened, 6–7 × 15–20 μ.

ON CAESALPINIACEAE:
Cercis canadensis L., West Virginia.
TYPE LOCALITY: Fayette County, West Virginia, on *Cercis canadensis*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3253*.

38. **Phyllosticta saccharina** Ellis & Martin, Jour. Myc. 2: 130. 1886.

Spots minute, scarcely exceeding 1 mm. in diameter but occasionally several coalescing and giving rise to a compound spot several mm. in diameter, white or whitish, surrounded by a circular or subcircular brownish border, the whitish center very thin and often breaking out and giving the leaf the appearance of having been stuck full of pin-holes; pycnidia few, rarely exceeding 2 or 3 to each spot, occurring on either side of the leaf, reaching a diameter of 100–125 μ, the ostiola indistinct; spores numerous, short-cylindric, the ends rather blunt, reaching a length of 15–16 μ or rarely as long as 20 μ and as broad as 2–3 μ, straight or occasionally slightly curved (also smaller ones described, 1.5 × 3 μ).

ON ACERACEAE:
Acer saccharum Marsh. (*A. saccharinum* Wang. not L.), Missouri.
Acer platanoides L., Columbia, Missouri.
TYPE LOCALITY: Missouri, on *Acer saccharinum*.
DISTRIBUTION: Missouri.

39. **Phyllosticta Oleae** Ellis & Martin; Martin, Jour. Myc. 2: 17. 1886.

Spots large, gray, occupying the apices and sides of the leaves, with a brown border; perithecia black, subglobose, prominent, mostly on the upper side of the leaf, reaching a diameter of 140 μ; spores ovoid, hyaline, 3–4 × 18–24 μ.

ON OLEACEAE:
Osmanthus americana (L.) Benth. & Hook. (*Olea americana* L.), Florida.
TYPE LOCALITY: Florida, on *Olea americana*.
DISTRIBUTION: Known only from the type locality.

40. **Phyllosticta Gelsemii** Ellis & Ev. Jour. Myc. 7: 131. 1892.

Spots usually terminal or marginal, often covering nearly half of the leaf-surface, pale-yellowish, when marginal occasionally semicircular and reaching a diameter of 4–5 mm.; pycnidia scattered, small, reaching a diameter of 80 μ; spores cylindric, hyaline, reaching a length of 16–18 μ and a diameter of 3–4 μ.

ON LOGANIACEAE:
Gelsemium sempervirens Ait. (cult.), New Jersey.
TYPE LOCALITY: Newfield, New Jersey, on *Gelsemium sempervirens*.
DISTRIBUTION: Known only from the type locality.

41. **Phyllosticta fusispora** Ellis & Ev. N. Am. Phyllost. 74. 1900.

Spots indefinite and indistinct, a little paler than the surrounding tissues of the leaf

which are dead and brown; pycnidia scattered over the infected spot, reaching a diameter of 100–150 μ; spores rather long and fusoid, straight or slightly curved, reaching a length of 18–20 μ and a diameter of 3 μ.

ON FAGACEAE:
Castanea dentata (Marsh.) Borkh. (*Castanea vesca americana* Michx.), Alabama.
TYPE LOCALITY: Alabama, on *Castanea vesca.*
DISTRIBUTION: Known only from the type locality.

42. **Phyllosticta tineola** Sacc. Michelia **1**: 531. 1879.

Spots indefinite or often covering nearly half of the leaf, terminal or lateral, ochraceous; pycnidia scattered, globose-lenticular, reaching a diameter of 70–80 μ; spores oblong-cylindric, rounded at the ends, curved, 3 × 15 μ, containing two oil-drops.

ON CAPRIFOLIACEAE:
Viburnum pubescens (Ait.) Pursh, Wisconsin.
TYPE LOCALITY: Europe, on *Viburnum Tinus.*
DISTRIBUTION: Wisconsin; also in Europe.

43. **Phyllosticta bumeliifolia** Heald & Wolf, Mycologia **3**: 7. 1911.

Spots circular or subcircular in form, definite, solitary or often confluent and then covering half the surface of the leaf, pale-brown, the individual spots reaching a diameter of 3.6 mm., visible on both sides of the leaf but more distinct on the upper surface; pycnidia numerous, scattered, black, restricted to the upper side of the leaf, reaching a diameter of 125–150 μ; spores globose or subglobose, granular, guttulate, reaching a diameter of 9–15 μ.

ON SAPOTACEAE:
Bumelia lanuginosa (Michx.) Pers., Texas.
Bumelia lycioides (L.) Pers., Alabama.
TYPE LOCALITY: Austin, Texas, on *Bumelia lanuginosa.*
DISTRIBUTION: Alabama and Texas.

44. **Phyllosticta portoricensis** E. Young, Mycologia **7**: 147. 1915.

Spots circular or nearly so, yellowish or whitish near the center, surrounded by a very narrow, slightly elevated rim, reaching a diameter of 2 mm.; pycnidia few, scattered over the infected spot, minute, reaching a diameter of 60–90 μ; spores subglobose to ovoid, about 5–7 × 9–14 μ.

ON EUPHORBIACEAE:
Croton lucidus L., Porto Rico.
TYPE LOCALITY: Guanica, Porto Rico, on *Croton lucidus.*
DISTRIBUTION: Known only from the type locality.

45. **Phyllosticta pallens** Ellis & Ev. N. Am. Phyllost. 74. 1900.

Phyllosticta Euonymi Tharp, Mycologia **9**: 119. 1917. Not *P. Euonymi* Sacc. 1878.

Spots usually marginal, pale-yellowish or whitish, with a definite, narrow, very dark-purple margin which gradually blends off into the healthy tissue of the leaf, reaching a diameter of 1 cm., about equally visible on either side of the leaf; pycnidia sparingly scattered over the infected spot, reaching a diameter of 100–150 μ; spores ellipsoid, 6–7 × 10–12 μ.

ON CELASTRACEAE:
Euonymus americanus L., Indiana.
Euonymus atropurpureus Jacq., Texas.
Euonymus europaeus L., Alabama.
TYPE LOCALITY: Tuskegee, Alabama, on *Euonymus europaeus.*
DISTRIBUTION: Indiana to Alabama and Texas.

46. **Phyllosticta Hamamelidis** (Cooke) Martin, Jour. Myc. **2**: 15. 1886.

Phyllosticta Hamamelidis Cooke; Rav. Fungi Am. *511;* hyponym. 1881.
Gloeosporium Hamamelidis Cooke, Grevillea **12**: 26. 1883.
Phyllosticta Hamamelidis Peck, Ann. Rep. N. Y. State Mus. **39**: 44. 1887.

Spots subcircular or irregular and often occupying half of the leaf-surface, dark-brown, visible on either side of the leaf but paler below; pycnidia scattered over the infected spot,

small, reaching a diameter of 100 μ; spores rather abundant, large, ellipsoid or occasionally subglobose, 8–10 × 12–15 μ.

ON HAMAMELIDACEAE:
Hamamelis virginiana L., New York, Pennsylvania, South Carolina, West Virginia, Wisconsin; Ontario.
TYPE LOCALITY: South Carolina, on *Hamamelis virginica* [*H. virginiana*].
DISTRIBUTION: New York to South Carolina and Wisconsin.
EXSICCATI: Rav. Fungi Am. *511;* Ellis, N. Am. Fungi *1154;* Ellis & Ev. Fungi Columb. *434;* Barth, Fungi Columb. *4244;* Shear, N. Y. Fungi *366;* Kabát & Bubák, Fungi Imperf. *802.*

47. **Phyllosticta Paviae** Desmaz. Ann. Sci. Nat. III. **8**: 32. 1847.

Phyllosticta sphaeropsoidea Ellis & Ev. Bull. Torrey Club **10**: 97. 1883.

Spots reddish-brown, irregular, often reaching a diameter of several cm. or occasionally covering a large part of the leaf-surface, visible on both sides of the leaf but paler on the under side; pycnidia numerous, quite evenly scattered over the infected spot, reaching a diameter of 120 μ; spores subglobose or ovoid, often containing one or two oil-drops, 8–10 × 12–15 μ.

Said to be the pycnidial stage of *Guignardia Aesculi* (Peck) Stewart. (In Phytopathology **6**: 9. 1916, it is suggested that *Phyllosticta paviaecola* Brunaud is also a synonym of this species.)

ON AESCULACEAE:
Aesculus glabra Willd., Illinois, Indiana, Iowa, Ohio, Pennsylvania.
Aesculus Hippocastanum L., Delaware, District of Columbia, Illinois, Indiana, Maine, Massachusetts, Michigan, New Jersey, Ohio, Pennsylvania, Wisconsin; Ontario.
Aesculus octandra Marsh. (*Aesculus flava* Ait.), Iowa.
Aesculus pavia L., Alabama.
TYPE LOCALITY: Europe, on *Pavia macrostachya.*
DISTRIBUTION: Maine to Wisconsin and Alabama; also in Europe.
EXSICCATI: Ellis, N. Am. Fungi *1159;* Ellis & Ev. N. Am. Fungi *3347;* Ellis & Ev. Fungi Columb. *276;* Barth. Fungi Columb. *4135;* Kellerm. Ohio Fungi *52;* Seym. & Earle, Econ. Fungi *117;* Rab.-Wint.-Paz. Fungi Eur. *3988.*

48. **Phyllosticta Eugeniae** E. Young, Mycologia **7**: 148. 1915.

Spots circular or subcircular, yellowish-brown or whitish in the center, the central portion often falling out, surrounded by a slightly elevated brownish-black rim outside of which is a yellowish area which gradually blends into the healthy tissue of the leaf, about equally visible on either side of the leaf, reaching a diameter of 2–4 mm.; pycnidia usually grouped near the center of the spot, dark-brownish, subglobose to ovoid, reaching a diameter of 80–150 μ; spores ellipsoid or subellipsoid, 4–6 × 10–16 μ.

ON MYRTACEAE:
Eugenia buxifolia (Sw.) Willd., Porto Rico.
TYPE LOCALITY: Mona Island, Porto Rico, on *Eugenia buxifolia.*
DISTRIBUTION: Porto Rico.

49. **Phyllosticta Negundinis** Sacc. & Speg.; Sacc. Michelia **1**: 149. 1878.

Phyllosticta arida Earle, Bull. Torrey Club **25**: 367. 1898.

Spots circular or subcircular in form, pale-yellowish throughout or a little paler in the center where they become very thin and semitransparent, the center often breaking out, reaching a diameter of 8 mm., bordered by a very narrow elevated ring, the entire spot surrounded by a slightly discolored area which reaches a diameter of nearly 2 cm.; pycnidia numerous, evenly distributed or arranged in a circle near the outer portion of the spot, appearing on either side of the leaf, but usually more numerous on the upper surface, reaching a diameter of 100–125 μ; spores rather large, subglobose to broad-ellipsoid or pyriform, reaching a length of 8–12 μ and a diameter of 5–6 μ, usually attenuated at the lower end toward the point of attachment, densely filled with a granular contents.

ON ACERACEAE:
Acer Negundo L. (*Negundo aceroides* Moench), Alabama, Maine, West Virginia.
TYPE LOCALITY: Conegliano, Italy, on *Negundo fraxinifolia.*
DISTRIBUTION: Maine to Alabama; also in Europe.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3154.*

50. **Phyllosticta Cookei** Sacc. Syll. Fung. **3**: 25. 1884.

Phyllosticta Magnoliae Cooke, Grevillea 9: 94. 1881. Not *P. Magnoliae* Sacc. 1878.

Spots circular or subcircular in form, reaching a diameter of 8 mm. to 1 cm., brown with a circumscribing line which is almost black and this surrounded by a slightly discolored zone about 2 mm. wide, the spot only slightly visible on the under side of the leaf; pycnidia quite evenly distributed over the infected area, reaching a diameter of 200–300 μ; spores ellipsoid or subellipsoid, 5–6 × 12–15 μ.

ON MAGNOLIACEAE:
Magnolia acuminata L., West Virginia.
Magnolia glauca L., New Jersey.
Magnolia virginiana L., Florida.
Magnolia sp., California, Mississippi.
TYPE LOCALITY: Kew, England, on *Magnolia grandiflora.*
DISTRIBUTION: New Jersey to Florida and California; also in Europe.

51. **Phyllosticta Everhartii** Sacc. & Syd. in Sacc. Syll. Fung. **14**: 865. 1899.

Phyllosticta Araliae Ellis & Ev. Proc. Acad. Phila. **1894**: 355. 1894. Not *P. Araliae* Sacc. & Berl. 1885.

Spots subcircular or ellipsoid but rather indefinite in outline, pale-brown, the margin usually paler and gradually blending off into the healthy tissue of the leaf, reaching a diameter of 1 cm., only faintly visible on the under side of the leaf; pycnidia few, scattered, flattened, reaching a diameter of 100–150 μ; spores ellipsoid, granular, sometimes containing two oil-drops, about 5–6 × 10–15 μ.

ON ARALIACEAE:
Aralia spinosa L., West Virginia.
TYPE LOCALITY: Nuttallburg, West Virginia, on *Aralia spinosa.*
DISTRIBUTION: Known only from the type locality.

52. **Phyllosticta Wislizeni** Ellis & Ev. Bull. Torrey Club **24**: 285. 1897.

Spots often terminal or lateral, consisting of dead areas of rather indefinite outline, dirty-brown, reaching a diameter of 5 mm. to 1 cm. or confluent and extending nearly the length of the leaf; pycnidia at first covered by the blackened epidermis which finally becomes variously ruptured, the rupture often hysteriiform, reaching a diameter of 250–300 μ, globose or subglobose; spores ellipsoid, or narrowed at one end, hyaline, 5–6 × 10–12 μ.

ON FAGACEAE:
Quercus Wislizeni DC., California.
TYPE LOCALITY: Amador County, California, on *Quercus Wislizeni.*
DISTRIBUTION: Known only from the type locality.

53. **Phyllosticta adusta** Ellis & Martin, Jour. Myc. **2**: 130. 1886.

Spots occasionally subcircular but more often irregular in form, often occurring at the margins of the leaves and nearly surrounding them, often covering nearly half of the entire surface, becoming cinereous or whitish, surrounded or partially surrounded by a yellowish, slightly elevated, definite border, reaching a diameter of 1–4 cm., about equally visible on either side of the leaf; pycnidia numerous and quite thickly scattered over the surface of the infected spot, more abundant on the upper surface, reaching a diameter of 150–200 μ, erumpent through the epidermis; spores ellipsoid or with the ends slightly narrowed, granular within, 4–7 × 10–18 μ.

ON RUTACEAE:
Citrus sp. (cult.), Alabama, Florida, and Louisiana.
TYPE LOCALITY: Florida, on *Citrus* sp.
DISTRIBUTION: Florida to Louisiana.
EXSICCATI: Ellis & Ev. N. Am. Fungi *1721.*

54. **Phyllosticta Sapotae** Sacc. Ann. Myc. **10:** 312. 1912.

Spots variable in form, often marginal, cinereous-brown; pycnidia rare, lenticular-globose, reaching a diameter of 100 μ, black; spores ellipsoid, subsessile, granular-guttulate, 5.5–6 × 10–12 μ.

ON SAPOTACEAE:
Sapota Achras Mill. (*Achras Sapota* L.) Bahamas.
TYPE LOCALITY: Bahama Islands, on *Achras Sapota*.
DISTRIBUTION: Known only from the type locality.

55. **Phyllosticta concentrica** Sacc. Nuovo Giorn. Bot. Ital. **8:** 203. 1876.

Phyllosticta concentrica sparsa Ellis & Ev. N. Am. Fungi *2936*, hyponym. 1893.
? *Phyllosticta decipiens* Ellis & Ev. N. Am. Phyllost. 55. 1900.

Spots definite and surrounded with faint concentric rings or indefinite and covering a large portion of the leaf; pycnidia numerous and thickly scattered over the infected area, occurring on both sides of the leaf, reaching a diameter of 150–180 μ; spores numerous, ovoid or pyriform, often quite strongly narrowed at one end, variable in size but usually about 5–6 × 10–12 μ.

ON ARALIACEAE:
Hedera Helix L. (cult.), New Jersey, Texas.
TYPE LOCALITY: Europe, on *Hedera Helix*.
DISTRIBUTION: New Jersey to Texas; also in Europe.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2936*, Ellis & Ev. Fungi Columb. *67*.

56. **Phyllosticta juliflora** Ellis & Barth. Jour. Myc. **8:** 174. 1902.

Spots irregular in form, pallid-white with a dark-purplish shade around the margin, reaching a diameter of 2–4 mm., subconfluent; pycnidia prominent, black, flattened or hysteriiform when dry, reaching a diameter of 500 μ; spores ovoid, 4–5 × 9–12 μ.

ON MIMOSACEAE:
Prosopis juliflora (Sw.) DC., Texas.
TYPE LOCALITY: Austin, Texas, on *Prosopis juliflora*.
DISTRIBUTION: Known only from the type locality.

57. **Phyllosticta faginea** Peck, Ann. Rep. N. Y. State Mus. **40:** 58. 1887.

Phyllosticta fagicola Ellis & Morgan; Ellis & Ev. Jour. Myc. **4:** 10. 1888.

Spots subcircular or irregular in form, appearing on the interior of the leaf or marginal, reaching a diameter of 1 to several cm., yellowish to whitish, with a narrow dark-brown border, about equally visible on both sides of the leaf; pycnidia few, scattered over the infected area, occurring on either the upper or the lower side of the leaf, reaching a diameter of 100–150 μ; spores numerous, ellipsoid to fusoid, 3–4 × 10–13 μ.

ON FAGACEAE:
Fagus grandifolia Ehrh. (*Fagus ferruginea* Ait.), New York, Ohio, Wisconsin.
TYPE LOCALITY: Argusville, New York, on *Fagus ferruginea*.
DISTRIBUTION: New York and New Jersey to Wisconsin.

58. **Phyllosticta Quercus** Sacc. & Speg.; Sacc. Michelia **1:** 138. 1878.

Spots variable, subcircular, pale-yellowish or whitish; pycnidia scattered, small, lenticular, reaching a diameter of 200 μ, olive-brown; spores ellipsoid, straight or curved, 2.5–4 × 7–12 μ, often containing two oil-drops.

ON FAGACEAE:
Quercus macrocarpa Michx., Wisconsin.
TYPE LOCALITY: Europe, on *Quercus* sp.
DISTRIBUTION: Wisconsin; also in Europe.

59. **Phyllosticta Hydrangeae** Ellis & Ev. Jour. Myc. **5**: 145. 1889.

Spots ellipsoid, rusty-brown, often with a darker slightly elevated margin, reaching a length of 1–1.5 cm. and about half as broad, faintly visible on the under side of the leaf; pycnidia few, scattered over the infected spot, reaching a diameter of 100–115 μ; spores long-ellipsoid, 3–4 × 12 μ.

ON HYDRANGEACEAE:
Hydrangea sp. (cult.), New Jersey.
TYPE LOCALITY: New Brunswick, New Jersey, on *Hydrangea* sp.
DISTRIBUTION: New Jersey; also in Europe.
EXSICCATI: Allesch. & Schn. Fungi Bavar. *656*.

60. **Phyllosticta ilicicola** (Cooke & Ellis) Ellis & Ev. Fungi Columb. *70*. 1893.

Sphaeropsis ilicicola Cooke & Ellis, Grevillea **6**: 3. 1877.
Phoma ilicicola Sacc. Syll. Fung. **3**: 106. 1884.
? *Phyllosticta Prini* Peck, Ann. Rep. N. Y. State Mus. **43**: 72. 1890.

Spots internal or more often marginal or terminal, often covering half of the leaf-surface or more, when internal often circular or subcircular in form and very variable in size, whitish, only slightly visible on the under surface of the leaf, reaching a diameter of 1–3 cm.; pycnidia numerous, scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 150–200 μ; spores numerous, ellipsoid or pyriform, granular within, rather variable in size and form but averaging 4–5 × 10–12 μ.

Said to be like the pycnidial stage of *Physalospora Ilicis* (Schleich.) Sacc.

ON AQUIFOLIACEAE:
Ilex opaca Ait., New Jersey, New York.
? *Ilex verticillata* (L.) A. Gray, New York.
TYPE LOCALITY: New Jersey, on *Ilex* sp.
DISTRIBUTION: New York and New Jersey.
ILLUSTRATION: Grevillea **6**: *pl. 96, f. 28*.
EXSICCATI: Ellis & Ev. Fungi Columb. *70*.

61. **Phyllosticta Vaccinii** Earle, Bull. Torrey Club **24**: 31. 1897.

Spots circular or semicircular, reddish-brown, indefinite or bounded by a narrow dark circumscribing line, more or less zonate, visible on both sides of the leaf but paler on the under side, reaching a diameter of 1 cm. or more; pycnidia rather numerous, thickly gregarious near the center of the spot, mainly on the upper side of the leaf, reaching a diameter of 80–100 μ; spores numerous, large, ellipsoid or subglobose, filled with oil-drops, 4–5 × 10–12 μ.

ON VACCINIACEAE:
Batodendron arboreum (Marsh.) Nutt. (*Vaccinium arboreum* Marsh.), Alabama, Florida.
TYPE LOCALITY: Auburn, Alabama.
DISTRIBUTION: Alabama and Florida.

62. **Phyllosticta tumoricola** Peck, Ann. Rep. N. Y. State Mus. **40**: 57. 1887.

Spots subcircular, arid, with a reddish or reddish-brown margin which is apparently caused by insects, reaching a diameter of 5 mm.; pycnidia usually occurring on the upper side of the leaf, reaching a diameter of 125–175 μ, depressed, brownish; spores narrowly ellipsoid, hyaline, with 2–4 oil-drops, 3 × 10–12 μ.

ON FAGACEAE:
Quercus alba L., New York.
TYPE LOCALITY: New York, on *Quercus alba*.
DISTRIBUTION: Known only from the type locality.

63. **Phyllosticta Garryae** Cooke & Hark. Grevillea **9**: 84. 1881.

Spots ellipsoid, grayish, with a purplish border; pycnidia occurring on the upper side of the leaf, prominent, black; spores ellipsoid, hyaline, 2–2.5 × 10–12 μ.

ON GARRYACEAE:
Garrya elliptica Dougl., California.
Garrya Lindheimeri Torr., Texas.
TYPE LOCALITY: California, on *Garrya elliptica*.
DISTRIBUTION: Texas and California.

64. **Phyllosticta sinuosa** Ellis & Martin, Am. Nat. **18**: 1264. 1884.

Spots almost circular in form, pale-yellowish or whitish, surrounded by an elevated brownish or blackish band, reaching a diameter of 4–5 mm., visible on both sides of the leaf but much less distinct on the under side; pycnidia quite thickly scattered over the infected spot, reaching a diameter of 150 μ; spores scant, ellipsoid-clavate, 1.5–2 $\times$ 6–15 μ.

ON OLEACEAE:
Osmanthus americana (L.) Benth. & Hook. (*Olea americana* L.), Florida.
TYPE LOCALITY: Florida, on *Olea americana*.
DISTRIBUTION: Florida and Mississippi.
EXSICCATI: Ellis, N. Am. Fungi *1367*; Ellis & Ev. N. Am. Fungi *1620*.

65. **Phyllosticta serotina** Cooke, Grevillea **12**: 26. 1883.

Spots circular or subcircular, or more rarely irregular, brownish or cinereous, bounded by a narrow, brownish-black border; pycnidia sparingly scattered, minute, reaching a diameter of 4–5 mm.; spores ellipsoid or lanceolate, hyaline, variable in size but averaging about 3 $\times$ 12 μ.

ON AMYGDALACEAE:
Padus virginiana (L.) Mill. (*Prunus virginiana* L., *Prunus serotina* Ehrh., *Cerasus serotina* Lois.), Nebraska, Pennsylvania, South Carolina.
TYPE LOCALITY: Aiken, South Carolina, on *Cerasus serotina*.
DISTRIBUTION: Pennsylvania to Nebraska and South Carolina.
EXSICCATI: Rav. Fungi Am. *513*; Barth. Fungi Columb. *2252*, *3646*, *4047* (as *Phyllosticta prunicola* Sacc.).

66. **Phyllosticta Lycii** Ellis & Kellerm. Am. Nat. **17**: 1166. 1883.

Spots circular or subcircular in form, at first brown, turning pale-yellow or whitish, the margin slightly elevated, reaching a diameter of 1–2 mm., less distinct on the under side of the leaf; pycnidia few, black, flattened, reaching a diameter of 100–140 μ; spores ellipsoid or subfusoid, 2–3 $\times$ 6–12 μ.

ON SOLANACEAE:
Lycium halimifolium Mill. (*Lycium vulgare* Dunal.), Ohio.
TYPE LOCALITY: Ohio, on *Lycium vulgare*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Ellis, N. Am. Fungi *1157*; Rab.-Wint.-Paz. Fungi Eur. *3986*.

67. **Phyllosticta Stevensii** E. Young, Mycologia **7**: 147. 1915.

Spots subcircular or irregular in form, sordid-white to yellowish-brown on the upper side of the leaf, indefinite on the under surface, the margin distinct, irregular, dark-brown, reaching a diameter of 4–12 mm.; pycnidia occurring on the upper side of the leaf, numerous, dark-brown, globose to ovoid, reaching a diameter of 100–150 μ, with a large distinct ostiolum; spores ellipsoid or fusiform, 2.5 $\times$ 7–15 μ.

ON TILIACEAE:
Triumfetta semitriloba Jacq., Porto Rico.
TYPE LOCALITY: Coamo, Porto Rico, on *Triumfetta semitriloba*.
DISTRIBUTION: Porto Rico.

68. **Phyllosticta subtilis** Peck, Bull. N. Y. State Mus. 150: 36. 1911.

Spots subcircular, reaching a diameter of 0.5–3 cm., often confluent, indefinite, reddish-brown; pycnidia numerous, densely gregarious, occurring on the under side of the leaf, reaching a diameter of 80–120 μ; spores ellipsoid, straight or curved, 1.5–2 $\times$ 8–12 μ.

ON JUGLANDACEAE:
Hicoria sp., New York.
TYPE LOCALITY: Painted Post, New York, on *Carya* sp.
DISTRIBUTION: Known only from the type locality.

69. **Phyllosticta Maclurae** Ellis & Ev. Jour. Myc. **5**: 145. 1889.

Spots subcircular or more or less indefinite in form, dark reddish-brown, not sharply distinguished from the surrounding tissue of the leaf when dry, reaching a diameter of 1 cm. or more; pycnidia scattered over the infected spot, rather prominent, reaching a diameter of 150–200 μ; spores ovoid to fusoid, 3 × 10–12 μ.

ON ARTOCARPACEAE:
Toxylon pomiferum Raf. (*Maclura pomifera* C. K. Schneid, *Maclura aurantiaca* Nutt.), New Jersey.
TYPE LOCALITY: Newfield, New Jersey, on *Maclura aurantiaca* Nutt.
DISTRIBUTION: New Jersey, and reported from Alabama by Atkinson.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2679*.

70. **Phyllosticta lindericola** Ellis & Ev. Proc. Acad. Phila. **1894**: 354. 1894.

Spots subcircular or irregular in form, cinereous in the center, with a narrow, almost black, burnt-looking border, reaching a diameter of 1 cm. or rarely more, about equally visible on either side of the leaf; pycinidia rather small, evenly distributed over the infected spot, mainly on the upper side of the leaf, reaching a diameter of 100–150 μ; spores small, ellipsoid or fusoid, 2–3 × 4–12 μ; some pycinidia containing much larger spores.

ON LAURACEAE:
Benzoin aestivale (L.) Nees (*Lindera Benzoin* Blume), West Virginia.
TYPE LOCALITY: Nuttallburg, West Virginia, on *Lindera Benzoin*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3251;* Ellis & Ev. Fungi Columb. *664*.

71. **Phyllosticta Wistariae** Sacc. Atti Ist. Veneto VI. **2**: 447. 1884.

Spots irregular, ochraceous, reaching a diameter of 1 cm. or more; pycnidia gregarious, lenticular, reaching a diameter of 150 μ; spores ellipsoid, containing two oil-drops, 2–3 × 7–10 μ; sporophores 1.5 × 15 μ.

ON FABACEAE:
Kraunhia sinensis (Sims) Makino (*Wisteria sinensis* Sweet; *Wisteria chinensis* DC.) (cult.), New Jersey.
TYPE LOCALITY: Europe, on *Wisteria chinensis*.
DISTRIBUTION: New Jersey; also in Europe.

72. **Phyllosticta maculans** Ellis & Ev. Proc. Acad. Phila. **1893**: 157. 1893.

? *Phoma Populi* Peck, Ann. Rep. N. Y. State Mus. **40**: 59. 1887.

Spots indefinite or obsolete, the entire leaf discolored and yellowish; pycnidia on either side of the leaf, congested into little groups, erumpent, conspicuous, reaching a diameter of 150 μ; spores abundant, cylindric, straight or very slightly curved, the ends abruptly attenuate, about 3–3.5 × 10–14 μ.

ON SALICACEAE:
Populus deltoides Marsh. (*Populus monilifera* Ait.), Kansas.
Populus tremuloides, New York.
TYPE LOCALITY: Rockport, Kansas, on *Populus deltoides*.
DISTRIBUTION: New York and Kansas.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2837;* Ellis & Ev. Fungi Columb. *1560*.

73. **Phyllosticta Gordoniae** Ellis & Martin, Jour. Myc. **1**: 100. 1885.

Spots marginal or terminal, often covering about one-third of the leaf-surface when terminal and extending halfway around the leaf when marginal, with an abrupt, slightly elevated, lighter-colored border, dark reddish-brown; pycnidia rather few, scattered, subglobose, slightly erumpent, reaching a diameter of 120–140 μ; spores abundant, small, ellipsoid, usually containing two small oil-drops, about 3 × 12 μ.

ON THEACEAE:
Gordonia Lasianthus (L.), J. Ellis, Florida.
TYPE LOCALITY: Florida, on *Gordonia Lasianthus*.
DISTRIBUTION: Florida.
EXSICCATI: Ellis & Ev. N. Am. Fungi *1618*.

74. **Phyllosticta Pyrorum** Cooke, Grevillea **12**: 26. 1883.

Spots white, large, often occupying half or the whole of the surface of the leaf, with a purple margin; pycnidia black, scattered, prominent, occurring only on the upper side of the leaf; spores elongate, straight or curved, 2 × 10 μ.

ON MALACEAE:
Pyrus sp., South Carolina.
Pyrus communis L., Illinois.
TYPE LOCALITY: South Carolina, on *Pyrus* sp.
DISTRIBUTION: South Carolina and Illinois.
EXSICCATI: Rav. Fungi Am. *512*.

75. **Phyllosticta Laurocerasi** Sacc. & Speg.; Sacc. Michelia **1**: 153. 1878.

Spots irregular or obsolete, the infected area covering a large part of the leaf; pycnidia quite evenly distributed over the infected area, or occasionally congested, reaching a diameter of 250–300 μ, mostly on the upper side of the leaf but occasionally on both sides; spores ellipsoid or fusoid, 2–3 × 10 μ.

ON AMYGDALACEAE:
Laurocerasus Laurocerasus (L.) Britton (*Prunus Laurocerasus* L.) (cult.), California.
TYPE LOCALITY: Europe, on *Prunus Laurocerasus*.
DISTRIBUTION: California; also in Europe.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3055*; Ellis & Ev. Fungi Columb. *275*.

76. **Phyllosticta adianticola** E. Young, Mycologia **7**: 144. 1915.

Spots ovate to ovate-cuneiform, often acute at the basal ends, reaching a diameter of 4–12 mm., the outer portion ashy-gray with a yellowish-brown border; pycnidia few, occurring on the upper side of the leaf, brown, globose or subglobose, reaching a diameter of 75–120 μ, with a distinct ostiolum which reaches a diameter of 12 μ; spores ovoid, hyaline, slightly pointed at one end, 2.5 × 5–7 μ.

ON POLYPODIACEAE:
Adiantum tenerum Sw., Porto Rico.
TYPE LOCALITY: Manati, Porto Rico, on *Adiantum tenerum*.
DISTRIBUTION: Porto Rico.

77. **Phyllosticta Lilii** Ellis & Dearness, Can. Rec. Sci. **5**: 267. 1893.

Spots one to four or five on a leaf, subcircular in form or elongate, often becoming twice as long as broad, with a narrow, slightly raised border, reaching a diameter of 4 mm. to 1 cm.; pycnidia sparingly scattered over the infected spot, conspicuous, occurring on the upper side of the leaf but visible on either side, reaching a diameter of 150–200 μ; spores hyaline or subhyaline, 3 × 4–5 μ.

Thought to represent the pycnidial stage of *Leptosphaeria Lilii* Ellis & Dearn., which occurs on similar spots on the same host.

ON LILIACEAE:
Lilium superbum L., Ontario.
TYPE LOCALITY: London, Ontario, on *Lilium superbum*.
DISTRIBUTION: Known only from the type locality.

78. **Phyllosticta yuccaegena** Ellis & Ev. Jour. Myc. **3**: 130. 1887.

Phyllosticta consimilis Ellis & Ev. N. Am. Phyllost. 70. 1900.

Spots subcircular, irregular, or elongate, brown to brownish-black, surrounded by an elevated margin usually leaving the surface of the spot concave, the whole spot often thicker than the surrounding tissues of the leaf, similar in appearance on both sides of the leaf, reaching a diameter of 1 cm. and a length of 2–3 cm.; pycnidia thickly scattered over the spot or clustered near its center, immersed but rather conspicuous, reaching a diameter of 300–500 μ; spores ellipsoid, 1.5–2 × 3–5 μ or rarely 3–4 × 5–7 μ.

Thought to represent the pycnidial stage of *Diatrype acervata* Ellis & Ev., which is often found associated with it, and the young asci of which were apparently mistaken for large pycnidiospores.

ON DRACAENACEAE:
Yucca sp., Alabama, Florida.
TYPE LOCALITY: Florida, on *Yucca* sp.
DISTRIBUTION: Alabama and Florida.

79. **Phyllosticta Panici** E. Young, Mycologia 7: 144. 1915.

Spots indefinite in form or diffuse; pycnidia few, scattered or often in clusters, restricted to the upper surface of the leaf, dark-brown to black, globose or subglobose, reaching a diameter of 72–144 μ; mycelium conspicuous, brown; spores ovoid, 4–5 $\times$ 9.5 μ.

ON POACEAE:
Panicum maximum Jacq., Porto Rico.
TYPE LOCALITY: Coamo, Porto Rico, on *Panicum maximum*.
DISTRIBUTION: Porto Rico.

80. **Phyllosticta Orontii** Ellis & Martin, Am. Nat. 16: 1002. 1882.

Spots large, elongate, ellipsoid, or irregular and often rather indefinite in outline, yellowish-brown; pycnidia rather thickly congested near the center of the spot, reaching a diameter of 150 μ; spores ellipsoid, 2.5 $\times$ 6–7 μ.

ON ARACEAE:
Orontium aquaticum L., New Jersey, Texas; Ontario.
TYPE LOCALITY: Newfield, New Jersey, on *Orontium aquaticum*.
DISTRIBUTION: Ontario, New Jersey, and Texas.

81. **Phyllosticta maculicola** Halsted, Ann. Rep. N. J. Exp Sta. 14: 412. 1894.

? *Phyllosticta Draconis* Berk. Notes Pl. Port. Welw. Fungi 5. 1853.

Spots somewhat angular, brown, with a surrounding yellow area, reaching a diameter of 2–3 mm.; pycnidia scattered over the infected spot; spores ellipsoid, hyaline, 3 $\times$ 7 μ.

ON DRACAENACEAE:
Dracaena sp. (cult.), New Jersey.
TYPE LOCALITY: New Brunswick, New Jersey, on *Dracaena* sp.
DISTRIBUTION: New Jersey; also in Europe.
ILLUSTRATION: Ann. Rep. N. J. Exp. Sta. 14: 412, *f. 64.*

82. **Phyllosticta macroguttata** Earle, Bull. Torrey Club 25: 367. 1898.

Spots circular or subcircular in form, brown, becoming whitish, with a darker-brown border, reaching a diameter of 1–2 mm., abundant and rarely confluent, paler on the under side of the leaf; pycnidia scattered, as many as six or eight on a spot, black, prominent, reaching a diameter of about 80 μ; spores subglobose or ellipsoid, about 5 $\times$ 6–7 μ, usually containing a large, conspicuous oil-drop.

ON FABACEAE:
Meibomia Dillenii (Darl.) Kuntze (*Desmodium Dillenii* Darl.), Alabama.
Meibomia sp., Alabama.
TYPE LOCALITY: Auburn, Alabama, on *Meibomia* sp.
DISTRIBUTION: Alabama.

83. **Phyllosticta Meibomiae** Seaver, sp. nov.

Spots circular or subcircular in form, reddish-brown, with a darker slightly elevated rim, similar in appearance on either side of the leaf; pycnidia quite numerous, mostly near the center of the infected spot, restricted to the upper side of the leaf, reaching a diameter of 100 μ with a distinct ostiolum; spores numerous, large, subglobose, or ellipsoid, hyaline granular within, reaching a diameter of 6–8 μ or 6 $\times$ 8 μ.

ON FABACEAE:
Meibomia rhombifolia (Ellis) Vail (*Desmodium rhombifolium* DC.), Florida.
Meibomia sp., Alabama.

Type collected at Eustis, Florida, May 28 to June 15, 1894, by George V. Nash (no. *1819*), on *Meibomia rhombifolia*, and determined as *Phyllosticta Desmodii* Ellis & Ev.
DISTRIBUTION: Florida and Alabama.

84. **Phyllosticta minor** Ellis & Ev. N. Am. Phyllost. 47. 1900.

Spots terminal and covering from a third to the entire leaf, yellowish-brown; pycnidia numerous, mainly on the upper side of the leaf, thickly scattered over the infected area, reaching a diameter of 100–120 μ; spores rather abundant, large, subglobose, filled with granules or with a single large oil-drop, reaching a diameter of 5–7 μ.

ON APOCYNACEAE:
Vinca minor L., New Jersey.
TYPE LOCALITY: Newfield, New Jersey, on *Vinca minor*.
DISTRIBUTION: Known only from the type locality.

85. **Phyllosticta Podophylli** (M. A. Curt.) Wint. Bull. Torrey Club **10**: 49. 1883.

Ascospora Podophylli M. A. Curt.; Peck, Ann. Rep. N. Y. State Cab. **23**: 65. 1872.

Spots large and more or less irregular in form, yellowish or brownish, sometimes marked with concentric rings, surrounded with a slightly elevated, narrow rim, reaching a diameter of 1 cm., visible on both sides of the leaf but less distinct on the under side; pycnidia scattered over the infected spot, visible on both sides of the leaf but apparently opening on the upper side, reaching a diameter of 120 μ; spores subglobose or pyriform, granular within, variable in size but averaging about 7 × 9 μ.

ON PODOPHYLLACEAE:
Podophyllum peltatum L., Alabama, Delaware, Illinois, Indiana, Mississippi, Missouri, Ohio.
TYPE LOCALITY: Near Lexington, Kentucky, on *Podophyllum peltatum*.
DISTRIBUTION: Delaware to Missouri and Mississippi.
EXSICCATI: Ellis, N. Am. Fungi *1156;* Ellis & Ev. Fungi Columb. *360:* Rab.-Wint.-Paz. Fungi Eur. *3696*.

86. **Phyllosticta Mitellae** Peck, Ann. Rep. N. Y. State Mus. **39**: 44. 1887.

Spots subcircular, brown, reaching a diameter of 5 mm. to 10 mm.; pycnidia minute, black, reaching a diameter of 62–75 μ; spores subglobose, hyaline, reaching a diameter of 5–6.5 μ (Wisconsin specimen 2–3 × 4–6 μ).

ON SAXIFRAGACEAE:
Mitella diphylla L., New York, Wisconsin.
TYPE LOCALITY: Newburgh, New York, on *Mitella diphylla*.
DISTRIBUTION: New York and Wisconsin.

87. **Phyllosticta Pyrolae** Ellis & Ev. Jour. Myc. **5**: 145. 1889.

Spots usually circular or nearly so, occasionally slightly irregular, reddish-brown, with a slightly elevated, very narrow rim, often surrounded by a dark area which gradually blends off into the healthy tissue of the leaf, reaching a diameter of 3 mm.; pycnidia numerous, thickly scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 100–110 μ; spores few, subglobose, 5–6 μ long.

Asci are found in some of the spots which appear to represent the perfect stage of this fungus.

ON PYROLACEAE:
Pyrola americana Sweet (*Pyrola rotundifolia* L. in part), Delaware.
TYPE LOCALITY: Newark, Delaware, on *Pyrola rotundifolia*.
DISTRIBUTION: Known only from the type locality.

88. **Phyllosticta Dodecathei** Trel. Prel. List Fungi Wis. 16. 1884.

Spots circular or subcircular in form, brown, reaching a diameter of 3 mm.; spores hyaline, ovoid or sometimes nearly globose, without oil-drops, 2–5 × 3.5–7 μ.

ON PRIMULACEAE:
Dodecatheon Meadia L., Wisconsin.
TYPE LOCALITY: Stoughton, Wisconsin, on *Dodecatheon Meadia.*
DISTRIBUTION: Known only from the type locality.

89. **Phyllosticta Steironematis** Dearness & House; House, Bull. N. Y. State Mus. 188: 38. 1916.

Spots reddish, scattered, circular or subcircular in form, reaching a diameter of 2–3 mm., becoming confluent and often extending over half or the whole of the leaf-surface; pycnidia occurring on either side of the leaf, reaching a diameter of 75–150 μ; spores globose or subglobose, reaching a diameter of 5–6 μ.

ON PRIMULACEAE:
Steironema ciliatum (L.) Raf., New York.
TYPE LOCALITY: North Greenbush, New York, on *Steironema ciliatum.*
DISTRIBUTION: Known only from the type locality.

90. **Phyllosticta gentianaecola** (DC.) Ellis & Ev. N. Am. Phyllost. 59. 1900.

Sphaeria lichenoides gentianaecola DC. Fl. Fr. 6: 148. 1815.
Sphaeria (*Depazea*) *gentianaecola* Fries, Syst. Myc. 2: 531. 1823.
Depazea gentianaecola Sacc. Syll. Fung. 3: 62. 1884.

Spots circular or subcircular in form, rather indefinite in outline, reaching a diameter of 2–3 mm., visible only on the upper side of the leaf, pale-yellowish, covered over with a radiating web of black mycelium; pycnidia thickly scattered over the infected spot, reaching a diameter of 150 μ; spores abundant, rather large, varying from subglobose to ellipsoid, 5 μ in diameter, or 5 × 7–8 μ.

ON CENTIANACEAE:
Dasystephana Andrewsii (Griseb.) Small (*Gentiana Andrewsii* Griseb.), Nebraska, Wisconsin.
Gentiana crinita Froel., Delaware.
TYPE LOCALITY: Europe, on *Gentiana lutea.*
DISTRIBUTION: Delaware, Wisconsin, and Nebraska; also in Europe.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2766.*

91. **Phyllosticta boehmeriicola** Davis, Trans. Wis. Acad. 19: 711. 1919.

Spots subcircular, olivaceous, with a darker margin and pale sordid center, reaching a diameter of 7–10 mm.; pycnidia occurring on the upper side of the leaf, scattered, lenticular, reaching a diameter of 100–150 μ; spores ovoid or ellipsoid, fuliginous-tinted, 2–3 × 4–7 μ.

ON URTICACEAE:
Boehmeria cylindrica (L.) Sw., Wisconsin.
TYPE LOCALITY: Shiocton, Wisconsin, on *Boehmeria cylindrica.*
DISTRIBUTION: Known only from the type locality.

92. **Phyllosticta Polygonorum** Sacc. Michelia 1: 141. 1878.

Spots circular or subcircular in form, or occasionally slightly irregular, surrounded by a very narrow slightly elevated rim, reddish-brown, reaching a diameter of 5–6 mm., with a central eye-like spot, surrounded by numerous zonate markings; pycnidia quite thickly scattered over the infected spot on either side of the leaf, reaching a diameter of 120–140 μ; spores numerous, ellipsoid, rather variable in size but usually averaging 2–3 × 4–6 μ.

ON POLYGONACEAE:
Fagopyrum Fagopyrum (L.) Karst. (*Polygonum Fagopyrum* L.), New Jersey.
TYPE LOCALITY: Europe, on *Polygonum Persicaria.*
DISTRIBUTION: New Jersey; also in Europe.

93. **Phyllosticta sicyna** Sacc. Ann. Myc. 8: 343. 1910.

Spots orbicular or angular, becoming white, the margin subelevated, not discolored; pycnidia few, on the upper side of the leaf, lenticular, black, reaching a diameter of 140–150 μ; spores ovoid-fusoid, not containing oil-drops, hyaline, 3–4 × 5.5–7 μ.

ON CUCURBITACEAE:
Sicyos angulatus L., New York.
TYPE LOCALITY: Lyndonville, New York, on *Sicyos angulatus*.
DISTRIBUTION: Known only from the type locality.

94. **Phyllosticta Pitcheriana** Fairman, Ann. Myc. **8**: 324. 1910.

Spots rounded or irregular, brown, lighter in the center, when young surrounded by a dark-purple border; pycnidia scattered over the infected spot, minute, restricted to the upper side of the leaf; spores ellipsoid or short-cylindric, 3–4 × 6–7 μ.

ON CARDUACEAE:
Heliopsis Pitcheriana Hort. (cult.), New York.
TYPE LOCALITY: Lyndonville, New York, on *Heliopsis Pitcheriana*.
DISTRIBUTION: Known only from the type locality.

95. **Phyllosticta Ludwigiae** Peck, Ann. Rep. N. Y. State Mus. **44**: 135. 1891.

Spots small, circular, sometimes confluent, pallid in the center, with a brownish or purplish-red border, reaching a diameter of 2 mm.; pycnidia occurring on the upper side of the leaf, few, often single, reaching a diameter of 100 μ; spores ellipsoid, containing two oil-drops, hyaline, 4 × 7–9 μ.

ON ONAGRACEAE:
Isnardia palustris L. (*Ludwigia palustris* Ell.), New York.
TYPE LOCALITY: Selkirk, New York, on *Ludwigia palustris*.
DISTRIBUTION: Known only from the type locality.
ILLUSTRATIONS: Ann. Rep. N. Y. State Mus. **44**: *pl. 4, f. 22–23.*

96. **Phyllosticta Betae** Oud. Nederl. Kruidk. Arch. II. **2**: 181. 1877.

?*Phyllosticta* sp. Halsted, Bull. N. J. Exp. Sta. 107: 4. 1895.

Spots circular, subcircular, or indefinite in form, becoming yellowish and dead in the center, with indefinite annulate markings, reaching a diameter of 1 cm. or rarely larger, sometimes covering a large portion of the leaf, about equally visible on either side of the leaf; pycnidia scattered, usually restricted to the under side of the leaf, reaching a diameter of 50–80 μ; spores ellipsoid, 4 × 8 μ.

ON CHENOPODIACEAE:
Beta vulgaris L. (cult.), Colorado, (New Jersey?), North Carolina, North Dakota.
TYPE LOCALITY: Europe.
DISTRIBUTION: (New Jersey?) to North Carolina, North Dakota and Colorado; also in Europe.
ILLUSTRATIONS: Bull. N. J. Exp. Sta. 107: *f. 2, 3.*
EXSICCATI: Brenckle, Fungi Dak. *362.*

97. **Phyllosticta glaucispora** Delacr. Bull. Soc. Myc. Fr. **9**: 266. 1893.

Spots circular or subcircular in form, whitish, surrounded by a narrow, slightly elevated, dark-colored rim, reaching a diameter of 2–3 mm., about equally visible on either side of the leaf; pycnidia scattered over the infected spot or grouped near the center, mainly on the upper surface of the leaf, reaching a diameter of 150 μ; spores numerous, variable in size and form, subglobose to ellipsoid, 4–5 × 6–8 μ, granular within.

ON APOCYNACEAE:
Urechites lutea (L.) Britton (*Vinca lutea* L.), Porto Rico.
TYPE LOCALITY: Europe, on *Nerium Oleander*.
DISTRIBUTION: Porto Rico; also in Europe.
ILLUSTRATION: Bull. Soc. Myc. Fr. **9**: *pl. 14, f. 5.*

98. **Phyllosticta Batatas** (Thüm.) Cooke, Grevillea **7**: 35. 1878.

Depazea Batatas Thüm. Myc. Univ. *598.* 1876.
Phyllosticta bataticola Ellis & Martin; Martin, Jour. Myc. **2**: 20. 1886.
?*Phoma Batatae* Ellis & Halsted; Halsted, Bull. N. J. Exp. Sta. 76: 25. 1890.

Spots circular or subcircular in form, sharply defined, pale-yellowish or whitish in the center, brownish about the margin, with a narrow rim which is slightly elevated and dark-

brown, visible on either side of the leaf but less distinct on the under side, reaching a diameter of 5 mm., often smaller or rarely larger; pycnidia scattered over the infected spot, usually restricted to the upper side of the leaf, reaching a diameter of 100–125 μ; spores ellipsoid, 4–4.5 × 6–8 μ, granular within.

Phoma Batatae is said by Harter & Field (Phytopathology **2**: 123. 1912) to be the conidial stage of a *Diaporthe*.

ON CONVOLVULACEAE:
Ipomoea Batatas (L.) Lam. (*Batatas edulis* Choisy) (cult.), Alabama, Kansas, Louisiana, New Jersey, North Carolina, South Carolina.
TYPE LOCALITY: Europe.
DISTRIBUTION: New Jersey to Alabama, Louisiana, and Kansas; also in Europe.
ILLUSTRATIONS: U. S. Dep. Agr. Farm. Bull. 714: *f. 14*.
EXSICCATI: Ellis, N. Am. Fungi *1155;* Rav. Fungi Am. *264*.

99. **Phyllosticta tenerrima** Ellis & Ev. Proc. Acad. Phila. 1893: 156. 1893.

Spots small, circular or subcircular, several often confluent, the tissue of the infected spot whitish and very thin and translucent, surrounded by a very narrow elevated rim, individual spots reaching a diameter of 1–2 mm.; pycnidia scattered over the infected spot, reaching a diameter of 60–100 μ; spores ellipsoid, 2–4 × 6–10 μ.

ON CARYOPHYLLACEAE:
Saponaria officinalis L., Ontario.
TYPE LOCALITY: London, Ontario, on *Saponaria officinalis*.
DISTRIBUTION: Known only from the type locality.

100. **Phyllosticta verbenicola** Martin, Jour. Myc. **2**: 26. 1886.

Spots pallid, with a reddish-brown border, reaching a diameter of 1–2 mm.; pycnidia few on each spot, dark-brown, lenticular in form, occurring on either side of the leaf, reaching a diameter of 140 μ; spores subhyaline, ellipsoid, 3 × 9 μ.

ON VERBENACEAE:
Verbena hastata L., New Jersey.
TYPE LOCALITY: New Jersey, on *Verbena hastata*.
DISTRIBUTION: Known only from the type locality.

101. **Phyllosticta Lappae** Sacc. Michelia **1**: 151. 1878.

Spots small, subcircular or angular, reaching a diameter of 1–2 mm., white or whitish, with a brown, slightly raised border; pycnidia few, small, scattered over the infected spot, mainly on the upper surface of the leaf, reaching a diameter of 70–120 μ; spores numerous, ellipsoid, 3 × 6–8 μ.

ON CARDUACEAE:
Arctium Lappa L. (*Lappa major* Gaertn.), Ohio; Ontario.
TYPE LOCALITY: Europe, on *Lappa minus*.
DISTRIBUTION: Ohio to Ontario.
EXSICCATI: Ellis, N. Am. Fungi *1166*.

102. **Phyllosticta fatiscens** Peck, Ann. Rep. N. Y. State Mus. **40**: 58. 1887.

Phyllosticta Orontii advena Ellis & Ev. Jour. Myc. **5**: 146. 1889.

Spots large, subcircular or irregular, pale-yellow, marked with concentric rings, reaching a diameter of 1–2 cm., or occasionally larger, equally visible on either side of the leaf; pycnidia mainly on the upper side of the leaf, reaching a diameter of 100 μ; spores ellipsoid, straight or unequal-sided, 3–4 × 6–10 μ.

ON NYMPHAEACEAE:
Nymphaea advena Soland. (*Nuphar advena* R. Br.), New York, Wisconsin.
TYPE LOCALITY: Argusville, Schoharie County, New York, on *Nuphar advena*.
DISTRIBUTION: New York and Wisconsin.

103. **Phyllosticta Dictamni** Fairman, Ann. Myc. **8**: 324. 1910.

Spots irregular, occurring on the tips or margins of the leaves, white or light-brown in

color; pycnidia numerous, reaching a diameter of 100–150 μ, black, with a central ostiolum; spores ellipsoid, hyaline, 3–3.5 × 7–10 μ.

ON RUTACEAE:
Dictamnus albus L. (*Dictamnus Fraxinella* Pers.) (cult.), New York.
TYPE LOCALITY: Lyndonville, New York, on *Dictamnus Fraxinella*.
DISTRIBUTION: Known only from the type locality.

104. **Phyllosticta Molluginis** Ellis & Halsted, Jour. Myc. 6: 33. 1890.

Spots covering a part or all of the leaf, pale-yellowish; pycnidia numerous, very thickly scattered, reaching a diameter of 100–150 μ; spores very numerous, ellipsoid or almond-shaped, 3–4 × 8–10 μ.

ON TETRAGONIACEAE:
Mollugo verticillata L., New Jersey.
TYPE LOCALITY: New Brunswick, New Jersey, on *Mollugo verticillata*.
DISTRIBUTION: Known only from the type locality.

105. **Phyllosticta guttulata** Halsted; Seym. & Earle, Econ. Fungi *271*. 1893.

Spots pale-yellowish or ash-colored, usually affecting the whole surface of the leaf; pycnidia numerous, scattered over the infected area, large, black, reaching a diameter of 150 μ, with a conspicuous ostiolum; spores abundant, ellipsoid or short-cylindric, 3–4 × 9–10 μ, often rather variable in both size and form.

ON OXALIDACEAE:
Xanthoxalis corniculata (L.) Small (*Oxalis corniculata* L.), Vermont.
Xanthoxalis stricta (L.) Small (*Oxalis stricta* L.), New Jersey.
TYPE LOCALITY: New Brunswick, New Jersey, on *Oxalis stricta*.
DISTRIBUTION: Vermont and New Jersey.
EXSICCATI: Seym. & Earle, Econ. Fungi *271*.

106. **Phyllosticta Petasitidis** Ellis & Ev. Proc. Acad. Phila. **1891**: 76. 1891.

Spots subcircular, reddish-brown, often whitish in the center, reaching a diameter of 5 mm. to 1 cm., often marked with concentric rings, the main spot surrounded by a brownish area of indefinite outline; pycnidia sparingly scattered over the infected spot, reaching a diameter of 100–120 μ; spores ellipsoid, 2.5–3 × 5–8 μ.

ON CARDUACEAE:
Petasites palmata (Ait.) A. Gray, Ontario.
TYPE LOCALITY: Ontario, on *Petasites palmata*.
DISTRIBUTION: Ontario; also in Europe.

107. **Phyllosticta Antennariae** Ellis & Ev. Jour. Myc. 4: 9. 1888.

Spots rather indefinite in outline, consisting of a central pale-yellowish or whitish area about 2 mm. in diameter, surrounded by a purplish area which gradually blends off into the healthy tissue of the leaf, the entire spot reaching a diameter of 4–5 mm., occurring on the upper side of the leaf and practically invisible on the under surface; pycnidia few, scattered over the central portion of the infected area, black; spores ovoid, 3 × 7 μ.

ON CARDUACEAE:
Antennaria Parlinii Fernald, District of Columbia.
Antennaria plantaginifolia (L.) Richards., Delaware.
TYPE LOCALITY: Faulkland, Delaware, on *Antennaria plantaginifolia*.
DISTRIBUTION: Delaware to District of Columbia.

108. **Phyllosticta Verbesinae** Heald & Wolf, Mycologia 3: 8. 1911.

Spots numerous, subcircular, grayish, surrounded by a blackish-brown area, reaching a diameter of 1–3 mm.; pycnidia occurring on the upper side of the leaf, reaching a diameter of 35–45 μ; spores ellipsoid, 2.5–3 × 4–6 μ.

ON CARDUACEAE:
Verbesina texana Buckl., Texas.
TYPE LOCALITY: Sequin, Texas, on *Verbesina texana*.
DISTRIBUTION: Known only from the type locality.

109. **Phyllosticta Cirsii** Desmaz. Ann. Sci. Nat. III. **8**: 31. 1847.

Spots small, circular, white or whitish, surrounded by a narrow brownish-black border, reaching a diameter of 1–2 mm. or rarely larger, scarcely visible on the under side of the leaf; pycnidia few, scattered over the infected spot, globose or subglobose, reaching a diameter of 100–150 μ; spores numerous, ellipsoid or rod-shaped, about 2–3 × 5–7 μ.

ON CARDUACEAE:
Cirsium arvense (L.) Scop. (*Serratula arvensis* L., *Cnicus arvensis* Hoffm., *Carduus arvensis* Robs.), New York; Ontario.
Cirsium undulatum (Nutt.) Spreng. (*Carduus undulatus* Nutt.), Washington.
TYPE LOCALITY: Europe, on *Serratula arvensis*.
DISTRIBUTION: Ontario, New York, and Washington; also in Europe.

110. **Phyllosticta Lycopersici** Peck, Ann. Rep. N. Y. State Mus. **40**: 57. 1887.

Spots large, subcircular, cinereous; pycnidia small, brown or blackish, opening by a single or sometimes by two ostiola; spores abundant, ellipsoid, 2.5–3 × 6–7.5 μ.

ON SOLANACEAE:
Lycopersicon Lycopersicon (L.) Karst. (*Lycopersicon esculentum* Mill.) (cult.), Alabama, New York.
TYPE LOCALITY: Menands, Albany County, New York, on *Lycopersicon esculentum*.
DISTRIBUTION: New York and Alabama.

111. **Phyllosticta Dulcamarae** Sacc. Michelia **1**: 160. 1878.

Spots marginal or internal, subcircular or occasionally irregular, whitish in the center, the tissue often becoming thin and translucent, dark brownish-black around the outside, reaching a diameter of 3–5 mm., less distinct on the under side of the leaf; pycnidia scattered over the infected spot, reaching a diameter of 100–110 μ; spores numerous, ellipsoid, 2–3 × 4–6 μ.

ON SOLANACEAE:
Solanum carolinense L., Missouri.
Solanum Dulcamara L., Ontario.
Solanum rostratum Dunal, Kansas.
TYPE LOCALITY: Europe, on *Solanum Dulcamara*.
DISTRIBUTION: Ontario to Kansas and Missouri; also in Europe.

112. **Phyllosticta hortorum** Speg. Atti Soc. Critt. Ital. **3**: 67. 1881.

Spots circular or subcircular in form, the outline more or less indefinite, yellowish with a grayish center; pycnidia rather numerous, scattered over the infected area, reaching a diameter of 100–150 μ, mainly on the upper side of the leaf; spores numerous, ellipsoid, 2–2.5 × 4–6 μ.

ON SOLANACEAE:
Datura Stramonium L., West Virginia.
Lycopersicon Lycopersicon (L.) Karst. (*Lycopersicon esculentum* Mill.) (cult.), no locality.
Solanum Melongena L. (cult.), Mississippi, Nebraska, New Jersey, New York, West Virginia.
TYPE LOCALITY: Europe, on *Solanum Melongena*.
DISTRIBUTION: New York to Nebraska and Mississippi; also in Europe.
EXSICCATI: Seym. & Earle, Econ. Fungi *446*.
ILLUSTRATION: Ann. Rep. N. J. Exp. Sta. **12**: 279, *f. 19, a–e*.

113. **Phyllosticta Mucunae** Ellis & Ev. N. Am. Phyllost. 48. 1900.

Spots small, circular or subcircular in form, or slightly irregular, reaching a diameter of 1–3 mm., often coalescing and giving rise to infected areas several cm. in diameter; pycnidia thickly scattered over the infected area on either side of the leaf, subglobose, rather conspicuous, reaching a diameter of 75–100 μ; spores numerous, ellipsoid or fusoid, 2–3 × 4–6 μ.

ON FABACEAE:
Stizolobium Deeringianum Bort (*Mucuna Deeringiana* Small), Alabama.
TYPE LOCALITY: Tuskegee, Alabama, on "*Mucuna utilis*" (*Stizolobium Deeringianum*).
DISTRIBUTION: Known only from the type locality.

114. **Phyllosticta Bonanseana** Sacc. Ann. Myc. 11: 547. 1913.

Spots variable, indefinite in outline, the whole leaf finally becoming yellow; pycnidia loosely gregarious or scattered, occurring on the under side of the leaf, erumpent, globose-lenticular, reaching a diameter of 175 μ, with a conspicuous ostiolum; spores cylindric-oblong, with two oil-drops, 2.5 × 7 μ.

ON FABACEAE:
Medicago arborea L. (cult.), Mexico.
TYPE LOCALITY: Mexico, on *Medicago arborea*.
DISTRIBUTION: Known only from the type locality.

115. **Phyllosticta orobella** Sacc. Atti Ist. Veneto VI. 2: 459. 1884.

Spots variable, becoming pale, without definite margin; pycnidia gregarious, prominent, at first covered, becoming erumpent, reaching a diameter of 80–100 μ; spores ellipsoid, unequal-sided, usually containing two oil-drops, hyaline, 3 × 7–7.5 μ.

ON FABACEAE:
Lathyrus maritimus (L.) Bigel., New York.
Lathyrus ochroleucus Hook., Montana.
TYPE LOCALITY: Europe, on *Orobus vernus*.
DISTRIBUTION: New York and Montana; also in Europe.

116. **Phyllosticta phaseolina** Sacc. Michelia 1: 149. 1878.

Spots usually terminal or marginal, more rarely internal, pale-yellowish, indefinite in outline or with a dark-brown border, often covering half the surface of the leaflet, visible on both sides; pycnidia scattered over the infected spot or congested in groups several mm. in diameter, black, reaching a diameter of 70 μ; spores numerous, small, ellipsoid, about 2–2.5 × 4–6 μ.

ON FABACEAE:
Phaseolus lunatus L. (cult,), Florida, New Jersey, West Virginia.
Phaseolus polystachyus (L.) B.S.P. (*Phaseolus perennis* Walt.), Mississippi.
Phaseolus sp. (cult.), New Jersey, South Carolina.
Strophostyles helvola (L.) Britton (*Phaseolus helvolus* L., *Phaseolus diversifolius* Pers.), Kansas, New Jersey, Ohio.
Strophostyles pauciflora (Benth.) S. Wats. (*Phaseolus pauciflorus* Benth.), Kansas, Nebraska.
Vigna sp. (cult.), New Jersey.
TYPE LOCALITY: Europe, on *Phaseolus vulgaris*.
DISTRIBUTION: New Jersey to Nebraska, Florida, and Mississippi; also in Europe.
EXSICCATI: Ellis & Ev. Fungi Columb. *2136;* Kellerm. Ohio Fungi *53*.

117. **Phyllosticta Commonsii** Ellis & Ev. Jour. Myc. 5: 146. 1889.

Spots subcircular or slightly irregular in form, definite, yellowish or whitish, reaching a diameter of 3–4 mm., smaller and less definite on the under side of the leaf; pycnidia few, scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 80–90 μ; spores numerous, hyaline or slightly smoky, 2–3 × 4–7 μ.

ON RANUNCULACEAE:
Paeonia sp. (cult.), Delaware; Ontario.
TYPE LOCALITY: Wilmington, Delaware, on *Paeonia* sp.
DISTRIBUTION: Ontario and Delaware.

118. **Phyllosticta Xanthorrhizae** Ellis & Nutt.; Millsp. & Nutt. Field Mus. Publ. Bot. 1: 105. 1896.

Spots rather large, ellipsoid or subellipsoid, dirty-white in the center with a dark-brown border which gradually blends off into the healthy tissue of the leaf, reaching a diameter of 8 mm., visible on both sides of the leaf but paler on the under side; pycnidia thickly scattered over the infected spot, reaching a diameter of 75 μ; spores ellipsoid, containing two large oil-drops, 2.5–3 × 5–6 μ.

ON RANUNCULACEAE:
Xanthorrhiza apiifolia L'Hér., West Virginia.
TYPE LOCALITY: West Virginia, on *Xanthorrhiza apiifolia*.
DISTRIBUTION: West Virginia.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3250*.

119. **Phyllosticta orbicularis** Ellis & Ev. Jour. Myc. **4**: 10. 1888.

Spots circular or subcircular in form, yellowish or cinereous with a narrow darker border, surrounded by a yellowish area which gradually grades off into the healthy tissue of the leaf; pycnidia scattered over the infected area, mostly on the upper side of the leaf, reaching a diameter of 100–110 μ; spores numerous, small, ellipsoid, about 2–2.5 × 5–6 μ.

ON CUCURBITACEAE:
Cucurbita Pepo L. (cult.), Delaware, New York.
TYPE LOCALITY: Faulkland, Delaware, on *Cucurbita Pepo*.
DISTRIBUTION: New York and Delaware.

120. **Phyllosticta Sechii** E. Young, Mycologia **7**: 149. 1915.

Spots irregular or confluent, whitish or yellowish-white above, darker below, the margin definite and slightly elevated; pycnidia numerous, dark-brown, restricted to the upper side of the leaf, reaching a diameter of 70–100 μ, with a large distinct ostiolum; spores hyaline, ellipsoid or subfusoid, 2.5 × 7–10 μ.

ON CUCURBITACEAE:
Sechium edule Sw., Porto Rico.
TYPE LOCALITY: Mayaguez, Porto Rico, on *Sechium edule*.
DISTRIBUTION: Known only from the type locality.

121. **Phyllosticta Cucurbitacearum** Sacc. Michelia **1**: 145. 1878.

Spots occurring on any part of the leaf, variable, the tissue becoming dry, sordid-white; pycnidia reaching a diameter of 80–100 μ; spores elongate, 2.5 × 5–6 μ, curved, containing two oil-drops.

ON CUCURBITACEAE:
Cucumis sativus L. (cult.), Ohio.
TYPE LOCALITY: Europe, on *Cucurbita Pepo*.
DISTRIBUTION: Ohio; also in Europe. Specimens on winter squash from New Jersey, in the herbarium of the New York Botanical Garden, are very poor, but have been referred to this species.

122. **Phyllosticta pallida** Seym. & Earle, Econ. Fungi *262*. 1893.

?*Phyllosticta nebulosa* Sacc. Michelia **2**: 276. 1881.

Spots large, indefinite, pale-yellowish or whitish in the center blending off into a yellowish area which covers more than half of the leaf, visible on both sides of the leaf but more conspicuous on the upper side; pycnidia scattered but abundant, more numerous near the center but distributed over the entire discolored portion of the leaf, reaching a diameter of 50–175 μ, mostly on the upper side of the leaf; spores ellipsoid or rod-like, 2–3 × 4–7 μ.

ON CARYOPHYLLACEAE:
Silene noctiflora L., New York, Wisconsin.
TYPE LOCALITY: Syracuse, New York, on *Silene noctiflora*.
DISTRIBUTION: New York (and Wisconsin, as *P. nebulosa* Sacc.).
EXSICCATI: Seym. & Earle, Econ. Fungi *262*.

123. **Phyllosticta Digitalis** Bellynck; Westend. & Wall. Herb. Crypt. *1053*. 1855.

Spots occasionally subcircular but more often irregular, often covering a large portion of the leaf, rusty-brown with a whitish portion in the center, reaching a diameter of 1 to several cm., about equally visible on either side of the leaf; pycnidia sparingly scattered over the infected spot, mainly on the upper side of the leaf, reaching a diameter of about 80 μ; spores ellipsoid, 2–3 × 6–7 μ.

ON SCROPHULARIACEAE:
Digitalis purpurea L., Alaska; Ontario.
TYPE LOCALITY: Europe, on *Digitalis lutea*.
DISTRIBUTION: Ontario and Alaska; also in Europe.
EXSICCATI: Barth. Fungi Columb. *4654*.

124. **Phyllosticta orbicula** Ellis & Ev. Proc. Acad. Phila. **1893**: 455. 1894.

?*Phyllosticta anceps* Sacc. Michelia **1**: 532. 1879.

Spots nearly circular in form, occasionally several coalescing and then irregular, white

or whitish, with a very narrow, slightly elevated rim, the tissue in the infected spot becoming very thin and translucent, often breaking out and leaving circular holes, reaching a diameter of 1–3 mm., about equally visible on either side of the leaf; pycnidia few, scattered over the infected spot, occurring on either side of the leaf, reaching a diameter of 90–125 μ; spores abundant, subhyaline, yellowish in mass, ellipsoid, about 2–3 × 5–9 μ.

ON BRASSICACEAE:
Armoracia Armoracia (L.) Britton (*Nasturtium Armoracia* Fries), New York; Ontario.
TYPE LOCALITY: London, Ontario, on *Nasturtium Armoracia*.
DISTRIBUTION: New York and Ontario; also in Europe.
EXSICCATI: Shear, N. Y. Fungi *368*.

125. **Phyllosticta plantaginella** Sacc. Syll. Fung. **11**: 481. 1895.

Spots subcircular, pale, the margin scarcely darker; pycnidia occurring on the upper side of the leaf, lenticular, broadly perforate, pale-brown, reaching a diameter of 90–100 μ; spores short-allantoid, slightly curved, 2–3 × 9 μ.

ON PLANTAGINACEAE:
Plantago major L., New York.
TYPE LOCALITY: Lyndonville, New York, on *Plantago major*.
DISTRIBUTION: Known only from the type locality.

126. **Phyllosticta Ipomoeae** Ellis & Kellerm. Jour. Myc. **3**: 102. 1887.

Spots circular or subcircular in form, reaching a diameter of 2–4 mm., rusty-brown, surrounded by a very narrow, dark border; pycnidia scattered over the infected spot, slightly projecting above; spores ellipsoid, containing two oil-drops, 2.5–3 × 4–6 μ.

ON CONVOLVULACEAE:
Exogonium repandum (Jacq.) Choisy, Porto Rico.
Ipomoea pandurata (L.) Meyer (*Convolvulus panduratus* L.), Florida, Kansas.
Ipomoea sp., Ohio, Texas.
TYPE LOCALITY: Mound City, Kansas, on *Ipomoea pandurata*.
DISTRIBUTION: Ohio to Kansas, Texas, and Florida; (Bermuda?); Porto Rico.
EXSICCATI: Kellerm. & Swingle, Kans. Fungi *42*.

127. **Phyllosticta Violae** Desmaz. Ann. Sci. Nat. III. **8**: 29. 1847.

Spots subcircular, pallid or yellowish, with a brownish border which is slightly raised, usually reaching a diameter of 2–4 mm.; pycnidia lenticular, brown, erumpent, occurring on the upper side of the leaf, few on each spot, reaching a diameter of 100–130 μ; spores hyaline, ellipsoid, 2–3 × 4–7 μ.

ON VIOLACEAE:
Viola cucullata Ait., New York.
Viola pubescens Ait., Iowa.
Viola Rafinesquii Greene, Alabama.
TYPE LOCALITY: Europe, on *Viola odorata*.
DISTRIBUTION: New York, Alabama, and Iowa; also in Europe.
ILLUSTRATIONS: Briosi & Cavara, Funghi Paras. *391*.
EXSICCATI: Ellis, N. Am. Fungi *1371*.

128. **Phyllosticta Nesaeae** Peck, Ann. Rep. N. Y. State Mus. **34**: 44. 1883.

Spots subcircular, rusty-brown or with a reddish border, reaching a diameter of 2–3 mm., visible on either side of the leaf but less distinct on the under side; pycnidia small, reaching a diameter of 50 μ; spores scant, about 2.5 × 7–10 μ.

ON LYTHRACEAE:
Decodon verticillatus (L.) Ell. (*Nesaea verticillata* H.B.K.), New Jersey, New York, Ohio.
TYPE LOCALITY: South Ballston, New York, on *Nesaea verticillata*.
DISTRIBUTION: New York, New Jersey, and Ohio.

129. **Phyllosticta ivaecola** Ellis & Ev. Jour. Myc. **2**: 37. 1886.

Spots small, circular or subcircular in form or occasionally slightly elongate, white or whitish, with a slightly elevated margin, usually occurring on the upper side of the leaf and

only slightly visible on the under side or more rarely occurring on both sides, reaching a diameter of 1–2 mm.; pycnidia few, minute, black, reaching a diameter of 75–90 μ; spores minute, ellipsoid, 2 × 4–6 μ.

ON AMBROSIACEAE:
Iva frutescens L., Louisiana.
Iva xanthiifolia Nutt., North Dakota, Wisconsin.
TYPE LOCALITY: Plaquemines Parish, Louisiana, on *Iva frutescens*.
DISTRIBUTION: Wisconsin, North Dakota, and Louisiana.
EXSICCATI: Brenckle, Fungi Dak. *338*.

130. **Phyllosticta nymphaeacea** Ellis & Ev. N. Am. Phyllost. 73. 1900.

Phyllosticta Orontii advena Ellis & Ev. Jour. Myc. 5: 146. 1889.

Spots circular or subcircular in form, at first brownish, becoming whitish in the center with the narrow margin darker and slightly raised, marked with concentric rings or lines, reaching a diameter of 5 mm. to 1 cm.; pycnidia scattered over the central part of the infected area, on the upper side of the leaf, minute, globose or subglobose, rather prominent, reaching a diameter of 60–80 μ; spores narrow-ellipsoid to fusoid, 2–3 × 7–10 μ.

ON NYMPHAEACEAE:
Nymphaea advena Soland. (*Nuphar advena* R. Br.), Texas.
Nymphaea sp., Alabama.
TYPE LOCALITY: Tuskegee, Alabama, on *Nymphaea* sp.
DISTRIBUTION: Alabama and Texas.

131. **Phyllosticta Mentzeliae** Ellis & Kellerm. Jour. Myc. 2: 4. 1886.

Spots subcircular to ellipsoid, pale-yellowish or whitish, often marked with one or two brownish rings near the outside, reaching a diameter of 5–8 mm., faintly visible on the under side of the leaf; pycnidia subglobose, more or less erumpent, reaching a diameter of 100–130 μ, scattered over the infected spot; spores abundant, 2–3 × 5–6 μ, ellipsoid or short-cylindric.

ON LOASACEAE:
?*Nuttallia nuda* (Pursh) Greene (*Mentzelia nuda* T. & G.), Kansas.
TYPE LOCALITY: Western Kansas, on *Mentzelia nuda*.
DISTRIBUTION: Known only from the type locality.

132. **Phyllosticta texensis** Seaver.

Phyllosicta verbenicola Tharp, Mycologia 9: 120. 1917. Not *P verbenicola* Martin, 1886.

Spots marginal or internal, gray with a purplish border, reaching a diameter of 2–6 mm., pycnidia occurring on both sides of the leaf, immersed, with the ostiole finally protruding, pyriform to globose, reaching a diameter of 35–40 μ, black; spores ovoid, hyaline, 2.5 × 6 μ;

ON VERBENACEAE:
Verbena bipinnatifida Nutt., Texas.
TYPE LOCALITY: Austin, Texas, on *Verbena bipinnatifida*.
DISTRIBUTION: Known only from the type locality.

133. **Phyllosticta Sanguinariae** Wint. Jour. Myc. 1: 123. 1885.

Spots subcircular or slightly irregular, grayish or whitish, the margin distinct, purplish-brown, bounded by a slightly elevated blackish line, reaching a diameter of 1–5 mm.; pycnidia scattered over the infected spot, subglobose, erumpent, reaching a diameter of 100 μ; spores numerous, ellipsoid, 1.5–2.5 × 5–7 μ.

ON PAPAVERACEAE:
Sanguinaria canadensis L., Missouri.
TYPE LOCALITY: Perryville, Perry County, Missouri, on *Sanguinaria canadensis*.
DISTRIBUTION: Missouri (and New York?).

134. **Phyllosticta Pachysandrae** Dearness & House; House, Bull. N. Y. State Mus. 179: 35. 1915.

Spots ashen, becoming sordid-brown, and translucent, at first circular, reaching a diameter of 2–5 mm., becoming confluent and breaking down the leaf in large areas along the

margin; pycnidia occurring on the upper side of the leaf, globose-conic, brown, reaching a diameter of 90–110 μ; spores minute, very numerous, hyaline, 1 × 4.5–6 μ.

ON BUXACEAE:
Pachysandra procumbens Michx., North Carolina.
TYPE LOCALITY: Biltmore, North Carolina, on *Pachysandra procumbens.*
DISTRIBUTION: Known only from the type locality.

135. **Phyllosticta cylindrica** Sacc. & Syd. in Sacc. Syll. Fung. **14**: 853. 1899.

Phyllosticta Heucherae Ellis & Ev. Am. Nat. **31**: 428. 1897. Not *P. Heucherae* Brunaud, 1890.

Spots subcircular but rather indefinite in outline, reaching a diameter of about 1 cm., becoming blackish by reason of the large number of pycnidia, about equally visible on either side of the leaf; pycnidia closely gregarious, reaching a diameter of 100–180 μ; spores abundant, minute, rod-like, about 1 × 5–6 μ.

ON SAXIFRAGACEAE:
Heuchera cylindrica Dougl., Idaho.
TYPE LOCALITY: Near Lake Waha, Idaho, on *Heuchera cylindrica.*
DISTRIBUTION: Known only from the type locality.

136. **Phyllosticta hibiscina** Ellis & Ev. Jour. Myc. **4**: 9. 1888.

Phyllosticta Hibisci Peck, Ann. Rep. N. Y. State Mus. **42**: 125. 1889.

Spots circular or subcircular or occasionally slightly irregular in form, yellowish or whitish, usually surrounded by a narrow dark-brown border, the infected tissue becoming very thin and often breaking out, reaching a diameter of 1 cm. or occasionally larger, indistinctly visible on the under side of the leaf; pycnidia rather numerous, scattered over the infected spot, usually restricted to the upper side of the leaf; spores ellipsoid or fusoid, 1–2 × 6–8 μ.

ON MALVACEAE:
Hibiscus Moscheutos L., Connecticut, Louisiana, New Jersey.
Hibiscus mutabilis L., Louisiana.
TYPE LOCALITY: Louisiana, on *Hibiscus mutabilis.*
DISTRIBUTION: Connecticut, New Jersey, and Louisiana.
EXSICCATI: Ellis & Ev. Fungi Columb. *1559.*
A specimen on *Abutilon umbellatum* Sweet, from Porto Rico, referred to this species by F. L. Stevens, conforms well in spore-characters but is much more indefinite, so that the determination is doubtful.

137. **Phyllosticta Antirrhini** Sydow, Hedwigia Beibl. **38**: 134. 1899.

Phoma sp. Stewart, Bull. N. Y. Exp. Sta. 179: 110. 1900.

Spots marginal or apical, reaching a diameter of 1 cm., definite in outline, occasionally subzonate, pallid above, greenish below; pycnidia occurring on the upper side of the leaf, globose, reaching a diameter of 100–180 μ; spores ellipsoid, hyaline, 1.5–2 × 4–6 μ.

ON SCROPHULARIACEAE:
Antirrhinum majus L. (cult.), Indiana, Massachusetts, New York.
TYPE LOCALITY: Europe, on *Antirrhinum* sp.
DISTRIBUTION: Massachusetts to Indiana; also in Europe.
ILLUSTRATIONS: Phytopathology **9**: 315–322, *f. 1–8;* **10**: 243-247, *f. 5–8.*
This species has been reported by Guba and Anderson as occurring on the stems of the above host where it causes a damping-off disease of the young plants. These observations have been confirmed in culture by E. M. Smiley (Phytopathology **10**: 232-248).

138. **Phyllosticta erratica** Ellis & Ev. N. Am. Phyllost. 43. 1900.

Spots usually marginal, dark-brown, often entirely surrounding the leaf and gradually encroaching on the living tissue, the boundary line indefinite; pycnidia sparingly scattered over the infected spot, erumpent, reaching a diameter of 80 μ; spores rather abundant, subglobose or ellipsoid, granular within, reaching a diameter of 6–8 μ

ON ULMACEAE:
Ulmus americana, Alabama.
Ulmus fulva Michx., Alabama.
TYPE LOCALITY: Alabama, on *Ulmus americana.*
DISTRIBUTION: Alabama.
Ellis, *loc. cit.*, also records this species on *Rosa* sp and *Thea* sp. from Alabama. The occurrence of the same species on such widely different hosts is rather unusual.

139. **Phyllosticta congesta** Heald & Wolf, Mycologia **3**: 8. 1911.

Spots small, numerous, brown, reaching a diameter of 0.5 to 0.8 mm., bounded by the veins and veinlets of the leaf, scarcely visible on the under side of the leaf; pycnidia a single one in the center of each spot; spores globose or slightly elongate, hyaline, reaching a diameter of 6–9 μ.

ON AMYGDALACEAE:
Prunus triflora "Abundance" (cult.), Georgia.
Prunus sp., Texas.
TYPE LOCALITY: Boerne, Texas, on *Prunus* sp.
DISTRIBUTION: Georgia and Texas.

140. **Phyllosticta arbutifolia** Ellis & Martin, Jour. Myc. **2**: 129. 1886.

Spots small, subcircular in outline, white or whitish, surrounded by a narrow yellowish area which blends off into the healthy tissues of the leaf, scarcely exceeding 1 mm. in diameter, visible only on the upper side of the leaf; pycnidia few, scattered over the infected spot, minute, black, reaching a diameter of 70–80 μ; spores not very abundant, subglobose or pyriform, reaching a diameter of 6–8 μ the longest way.

ON MALACEAE:
Aronia arbutifolia (L.) Ell. (*Pyrus arbutifolia* L.), New Jersey.
TYPE LOCALITY: Newfield, New Jersey, on *Pyrus arbutifolia*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Ellis & Ev. N. Am Fungi *1725*.

141. **Phyllosticta toxica** Ellis & Martin, Am. Nat. **16**: 1002. 1882.

Spots rather small, numerous, nearly circular in form, whitish in the center and dark-brownish or blackish around the outside, reaching a diameter of about 2 mm.; pycnidia few, small, reaching a diameter of 70 μ; spores subglobose, about 6–7 μ in diameter, densely granular within.

ON ANACARDIACEAE:
Toxicodendron radicans (L.) Kuntze (*Rhus radicans* L., *Rhus Toxicodendron* Michx., in part, not L.), Iowa.
TYPE LOCALITY: Decorah, Iowa, on *Rhus Toxicodendron*.
DISTRIBUTION: Iowa.
EXSICCATI: Ellis, N. Am. Fungi *1162*.

142. **Phyllosticta Gaultheriae** Ellis & Ev. Jour. Myc. **1**: 153. 1885.

Spots subcircular and definite in outline, at first reddish-brown, becoming cinereous on the upper side of the leaf, surrounded by a dark, slightly elevated rim, reaching a diameter of 3–4 mm.; pycnidia rather thickly scattered over the infected spot, erumpent through the epidermis, reaching a diameter of 100–115 μ; spores subglobose to ellipsoid, about 6 μ in diameter, or 4–5 × 5–7 μ.

ON ERICACEAE:
Gaultheria procumbens L., New Jersey
Gaultheria Shallon Pursh, California, Oregon, Washington; British Columbia.
TYPE LOCALITY: Newfield, New Jersey, on *Gaultheria procumbens*.
DISTRIBUTION: New Jersey; British Columbia to California.
EXSICCATI: Ellis & Ev. N. Am. Fungi *1619, 1966;* Ellis & Ev. Fungi Columb. *358;* Barth. Fungi Columb. *3160*.

143. **Phyllosticta rubra*** Peck, Ann. Rep. N. Y. State Mus. **35**: 138. 1884.

Spots small, angular or irregular, sometimes confluent, red or reddish-brown, usually reaching a diameter of 1–2 mm.; pycnidia 1–5 on each spot, occurring on the upper side of the leaf, minute, black; spores broad-ellipsoid or subglobose, 6 × 8 μ, hyaline.

ON MALACEAE:
Crataegus Calpodendron (Ehrh.) Medic. (*Crataegus tomentosa* DuRoi), New York.
TYPE LOCALITY: New York, on *Crataegus tomentosa*.
DISTRIBUTION: New York and reported from Kansas on *Crataegus sanguinea*.

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* This was printed as *Phyllosticta Crataegi* and changed in all of the copies of Peck's reports examined to *Phyllosticta rubra*, apparently to avoid conflict with *Phyllosticta Crataegi* (Cooke) Sacc. 1884.

144. **Phyllosticta solitaria** Ellis & Ev. Proc. Acad. Phila. 1895: 430. 1895.

Spots small, whitish, surrounded by a darker brown area, the main spot reaching a diameter of 1 mm. on leaves, fruit, and twigs; pycnidia few, usually only one in the center of each spot, reaching a diameter of 75 μ; spores large, ellipsoid or subglobose, about 5–6 × 6–8 μ. It occurs on the petioles and midribs on the under surface of the leaves, causing cankers; also on the twigs causing elongate cankers; also on fruit causing apple blotch.

ON MALACEAE:

Crataegus sp., New Jersey.

Malus Malus (L.) Britton (*Pyrus Malus* L.), Georgia, Indiana, Maryland, Missouri, North Carolina, Oklahoma, Pennsylvania, South Carolina, Texas, Virginia, West Virginia.

Malus coronaria (L.) Mill. (*Pyrus coronaria* L.), Indiana, West Virginia.

TYPE LOCALITY: Crawfordsville, Indiana, on *Pyrus coronaria*.

DISTRIBUTION: Eastern half of the United States.

ILLUSTRATIONS: Bull. N. J. Exp. Sta. 313: 69, *f. 363–373;* Bull. U. S. Dep. Agr. Pl. Ind. 144: *pls. 1–6;* Bull. Kans. Exp. Sta. 196: *f. 1–5.*

145. **Phyllosticta guanicensis** E. Young, Mycologia **7**: 146. 1915.

Spots circular or nearly so, whitish in the center, surrounded by a dark-brown, slightly elevated border, reaching a diameter of 1–2 mm., similar on the under side of the leaf but less distinct; pycnidia few, scattered over the infected spot or more often clustered near its center, subglobose, reaching a diameter of 120 μ, with a distinct ostiolum 12–15 μ in diameter; spores subglobose to ellipsoid, rather variable in size and form, about 5 × 6–10 μ.

ON CAESALPINIACEAE:

Guilandina crista (L.) Small, Porto Rico.

TYPE LOCALITY: Guanica, Porto Rico, on *Guilandina crista*.

DISTRIBUTION: Known only from the type locality.

146. **Phyllosticta viticola** (Berk. & Curt.) Thüm. Pilze Weinst. 188. 1878.

Septoria viticola Berk. & Curt.; Thüm. Pilze Weinst. 188. 1878.
Phyllosticta Labruscae Thüm. Pilze Weinst. 189. 1878.
Phyllosticta Ampelopsidis Ellis & Martin; Martin, Jour. Myc. **2**: 14. 1886.

Spots circular or subcircular in form, slightly irregular or occasionally two or three coalescing, reaching a diameter of 4–5 mm., pale yellowish-brown, surrounded by a dark-brown border, visible on either side of the leaf but more distinct on the upper side; pycnidia numerous, restricted to the upper side of the leaf, clustered in the center or arranged in a circle near the outer margin of the infected spot, reaching a diameter of 130 μ; spores subhyaline, subglobose to ellipsoid or pyriform, 6–7 × 8–11 μ.

ON VITACEAE:

Ampelopsis arborea (L.) Rusby (*Vitis bipinnata* T. & G.), Mississippi.

Muscadinia Munsoniana (Simpson) Small (*Vitis Munsoniana* Simpson), Florida.

Parthenocissus quinquefolia (L.) Planch. (*Ampelopsis quinquefolia* Michx., *Parthenocissus vitacea* A. S. Hitchc.), Kansas, Michigan, Minnesota, Missouri, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Wisconsin; Ontario.

Parthenocissus tricuspidata (Sieb. & Zucc.) Planch., Maryland, Massachusetts, New York, North Carolina, Pennsylvania; Ontario.

Vitis aestivalis Michx., Pennsylvania.

Vitis Labrusca L., Indiana, Missouri, New Jersey, North Carolina, Pennsylvania; (Florida?).

Vitis rotundifolia Michx., Delaware, Mississippi, North Carolina, South Carolina.

Vitis rupestris Scheele, West Virginia.

Vitis Simpsonii Munson, Florida.

Vitis vulpina L. (*Vitis riparia* Michx.), District of Columbia, Florida, Illinois, Indiana Iowa, Kansas, Mississippi, Ohio.

Vitis sp., Illinois, South Carolina.

TYPE LOCALITY: Europe, on *Vitis vulpina*.

DISTRIBUTION: New York to North Dakota, Florida, and Mississippi; also in Europe.

ILLUSTRATION: Bull. N. J. Exp. Sta. 313: *f. 313.*

EXSICCATI: Ellis, N. Am. Fungi *626, 1169;* Ellis & Ev. Fungi Columb. *432, 563,*[1] *564, 662, 1838;* Barth. Fungi Columb. *2950, 2951, 3053, 3054, 3246, 4046, 4134, 4245, 4557;* Brenckle, Fungi Dak. *393, 409;* Kellerm. Ohio Fungi *146;* Seym. & Earle, Econ. Fungi *410;* Rab.-Wint.-Paz. Fungi Eur. *3693, 3985;* Thüm. Myc. Univ. *1393;* Wilson & Seaver, Ascom. *55;* Roum. Fungi Sel. *4750.*

147. **Phyllosticta clethricola** Ellis & Martin, Am. Nat. **16**: 1002. 1882.

Spots circular, subcircular, or irregular, rusty-brown, with a definite, slightly elevated border, reaching a diameter of 2–3 mm., paler on the under side of the leaf; pycnidia few, minute, scattered over the infected spot, appearing on either side of the leaf, reaching a diameter of 120 μ; spores broad-ellipsoid, about 6 × 9 μ.

ON CLETHRACEAE:
Clethra alnifolia L., New Jersey.
TYPE LOCALITY: Newfield, New Jersey, on *Clethra alnifolia*.
DISTRIBUTION: New Jersey.
EXSICCATI: Ellis, N. Am. Fungi *1153;* Ellis & Ev. Fungi Columb. *1246*.

148. **Phyllosticta Cyrillae** Ellis & Martin, Jour. Myc. **2**: 130. 1886.

Spots usually terminal or marginal, large, reddish-brown, becoming cinereous with age, often covering nearly half of the leaf, visible on either side but a little paler on the under side; pycnidia thickly scattered over the infected spot, restricted to the upper side of the leaf but slightly visible on the under side also, reaching a diameter of 110–140 μ; spores subglobose to ovoid, granular, hyaline, 5–7 × 8–10 μ.

ON CYRILLACEAE:
Cyrilla racemiflora L., Florida.
TYPE LOCALITY: Green Cove, Florida, on *Cyrilla racemiflora*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Ellis & Ev. N. Am. Fungi *1720*.

149. **Phyllosticta Lagerstroemiae** Ellis & Ev. Jour. Myc. **4**: 101. 1888.

?*Phoma Lagerstroemiae foliicola* Ellis & Ev. Jour. Myc. **4**: 101. 1888.

Spots terminal, killing the tips of the leaves which become yellowish-brown or cinereous; pycnidia black, gregarious, erumpent, reaching a diameter of 100–110 μ; spores ovoid, 4–5 × 6–8 μ.

ON LYTHRACEAE:
Lagerstroemia indica L., Louisiana.
TYPE LOCALITY: Point a la Hache, Louisiana, on *Lagerstroemia indica*.
DISTRIBUTION: Known only from the type locality.

150. **Phyllosticta globifera** Ellis & Ev.; Millsp. & Nutt. Field Mus. Publ. **1**: 104. 1896.

?*Sphaeria lichenoides cornicola* DC. Fl. Fr. **6**: 148. 1815.
?*Sphaeria* (*Depazea*) *cornicola* Fries, Syst. Myc. **2**: 530. 1823.
Phyllosticta cornicola Rab. in Klotzsch, Herb. Viv. Myc. ed. 2. *454*. 1857.

Spots marginal or internal, yellowish-brown, with a slightly darker, abrupt margin, circular or subcircular when internal and reaching a diameter of 1 cm., when marginal often half surrounding the leaf, visible on both sides but paler below; pycnidia sparingly scattered over the infected spot, on either side of the leaf, reaching a diameter of 100–120 μ, subglobose, black; spores abundant, subglobose or ellipsoid, 4–6 × 5–8 μ, granular within.

ON CORNACEAE:
Cornus femina Mill. (*Cornus paniculata* L'Hér.), Kansas.
Cynoxylon floridum (L.) Raf. (*Cornus florida* L.), Delaware, West Virginia.
TYPE LOCALITY: West Virginia, on *Cornus florida*.
DISTRIBUTION: Delaware to Kansas; also in Europe?.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2833?*; Ellis & Ev. Fungi Columb. *665*.

151. **Phyllosticta Epigaeae** Peck, Ann. Rep. N. Y. State Mus. **38**: 94. 1885.

Spots large, irregular, brown or reddish-brown, reaching a diameter of 1 cm. or more; pycnidia minute, reaching a diameter of 100–150 μ, at first covered by the epidermis, later becoming erumpent, occurring on the upper side of the leaf, black; spores ellipsoid, hyaline, 4 × 7.5 μ.

ON ERICACEAE:
Epigaea repens L., New York.
TYPE LOCALITY: Caroga, Fulton County, New York, on *Epigaea repens*.
DISTRIBUTION: Known only from the type locality.

152. **Phyllosticta amicta** Ellis & Ev. Proc. Acad. Phila. **1895**: 430. 1895.

Spots usually marginal, irregular in form, becoming cinereous, often bordered by a narrow reddish-brown line, visible on both sides of the leaf but paler on the under side, reaching a diameter of 1 cm. or more; pycnidia numerous, black, depressed-globose, reaching a diameter of 120–200 μ; spores subglobose to ellipsoid, variable in size but averaging 4–5 $\times$ 7–10 μ, hyaline or subhyaline.

ON ERICACEAE:
Uva-ursi Manzanita (Parry) Abrams (*Arctostaphylos Manzanita* Parry), California.
Uva-ursi tomentosa (Pursh) Abrams (*Arctostaphylos tomentosa* Lindl.), Oregon.
Uva-ursi viscida (Parry) Abrams (*Arctostaphylos viscida* Parry), Oregon, California.
TYPE LOCALITY: Jackson, Amador County, California, on *Arctostaphylos viscida*.
DISTRIBUTION: Oregon and California.

153. **Phyllosticta Asiminae** Ellis & Kellerm. Am. Nat. **17**: 1165. 1883.

Spots numerous, rarely subcircular but more often irregular, giving to the leaf a mottled appearance, yellowish-white, surrounded by a slightly elevated narrow, black border, the surrounding tissue of the leaf being slightly discolored, the main spot reaching a diameter of 1 cm. or rarely more, indistinctly visible on the under side of the leaf; pycnidia numerous, small, quite evenly distributed over the infected spot, reaching a diameter of 100–125 μ; spores rather large, subglobose to ellipsoid or ovoid, 5–6 $\times$ 7–9 μ, filled with granules.

ON ANONACEAE:
Asimina pygmaea (Bartr.) A. Gray, Florida, Indiana, Maryland.
Asimina triloba (L.) Dunal, District of Columbia, Illinois, Missouri, Ohio, West Virginia.
TYPE LOCALITY: Ohio, on *Asimina triloba*.
DISTRIBUTION: Delaware to Missouri and Florida.
EXSICCATI: Ellis, N. Am. Fungi *1164;* Ellis & Ev. Fungi Columb. *431;* Kellerm. Ohio Fungi *9;* Seym. & Earle, Econ. Fungi *103;* Rab.-Wint.-Paz. Fung. Eur. *3983*.

154. **Phyllosticta Siliquastri** Sacc. & Speg.; Sacc. Michelia **1**: 148. 1878.

Spots variable in form, becoming dry and brown; pycnidia scattered, prominent, umbilicate, reaching a diameter of 120–150 μ, olivaceous to yellowish; spores ellipsoid, 3–4 $\times$ 6–7 μ, containing two oil-drops.

ON CAESALPINIACEAE:
Cercis canadensis L., Alabama.
TYPE LOCALITY: Europe, on *Cercis Siliquastrum* L.
DISTRIBUTION: Alabama; also in Europe.

155. **Phyllosticta Lantanoidis** Peck, Ann. Rep. N. Y. State Mus. **38**: 94. 1885.

Spots rather large, subcircular, yellowish or grayish, with a brown margin, reaching a diameter of 5–7 mm.; pycnidia minute, slightly prominent, occurring only on the upper side of the leaf, reaching a diameter of 100 μ; spores ellipsoid, hyaline, containing two oil-drops, 4 $\times$ 6–7.5 μ.

ON CAPRIFOLIACEAE:
Viburnum alnifolium Marsh. (*Viburnum lantanoides* Michx.), New York.
Viburnum cassinoides L., New York.
TYPE LOCALITY: Caroga, Fulton County, New York, on *Viburnum lantanoides*.
DISTRIBUTION: New York.

156. **Phyllosticta liriodendrica** Sacc. Syll. Fung. **3**: 30. 1884.

?*Sphaeria* (*Depazea*) *Tulipiferae* Schw. Trans. Am.Phil. Soc. II. **4**: 226. 1832.
Phyllosticta Liriodendri Cooke, Grevillea **12**: 26 1883. Not *P. Liriodendri* Thüm. 1879.

Phyllosticta circumvallata Wint. Jour. Myc. 1: 123. 1885.
?*Phyllosticta macrospora* Ellis & Ev. Proc. Acad. Phila. 1894: 355. 1894.

Spots circular or subcircular in form, reaching a diameter of 5 mm. or rarely 1 cm., consisting of a dark-brown central portion about 2 mm. in diameter and forming a raised blister which is apparently the work of a leaf-miner or other insect, the outer portion of the spot brown but lighter than the center, the entire spot very conspicuous on both sides of the leaf; pycnidia scattered over the outer portion of the spot, usually on the upper surface of the leaf, reaching a diameter of 100–120 μ; spores ellipsoid or subellipsoid, 3.5–4 $\times$ 7–9 μ.

The perfect stage is *Sphaerella Liriodendri* Cooke. The large spores of *P. macrospora* may be young asci of the *Sphaerella*.

ON MAGNOLIACEAE:
Liriodendron Tulipifera L., Illinois, New Jersey, New York, Ohio, Pennsylvania, West Virginia, Wisconsin.
TYPE LOCALITY: South Carolina, on *Liriodendron Tulipifera*.
DISTRIBUTION: New York to Wisconsin, Illinois, and West Virginia.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3256;* Ellis & Ev. Fungi Columb. *666;* Wilson & Seaver, Ascom. *20*.

157. **Phyllosticta Catalpae** Ellis & Martin, Am. Nat. 18: 189. 1884.

Spots circular or subcircular in form, yellowish to cinereous or whitish, visible on both sides of the leaf, convex on the upper and concave on the under surface, reaching a diameter of 4 or 5 mm., the main spot surrounded by a slightly discolored area; pycnidia few, scattered over the infected area, reaching a diameter of 75–80 μ; spores ellipsoid or with the ends slightly narrowed, 3–4 $\times$ 5–7 μ, granular within and hyaline or nearly so.

ON BIGNONIACEAE:
Catalpa Bungei C. Meyer (cult.), Pennsylvania.
Catalpa Catalpa (L.) Karst. (*Bignonia Catalpa* L., *Catalpa bignonioides* Walt.), Alabama, District of Columbia, Maryland, New Jersey, New York, Pennsylvania, South Carolina.
Catalpa sp., Indiana, Massachusetts.
TYPE LOCALITY: West Chester, Pennsylvania, on *Catalpa bignonioides*.
DISTRIBUTION: Massachusetts to Alabama and Indiana.
EXSICCATI: Ellis, N. Am. Fungi *1368*.

158. **Phyllosticta grisea** Peck, Bull. N. Y. State Mus. 67: 29. 1903.

Spots subcircular, gray, with a purplish-brown border, the main part of the spot finally becoming brown, and brown on the under side of the leaf, reaching a diameter of 1–1.5 mm.; pycnidia occurring on the upper side of the leaf, erumpent, black; spores ellipsoid, hyaline, 4 $\times$ 6–7.5 μ.

ON MALACEAE:
Crataegus praecox Sargent, New York.
TYPE LOCALITY: Crown Point, New York, on *Crataegus praecox*.
DISTRIBUTION: Known only from the type locality.

159. **Phyllosticta Cephalanthi** Tharp, Mycologia 9: 119. 1917.

Spots circular or nearly circular in form, small, cinereous in the center with a narrow, dark-brown border, rather sharply defined, reaching a diameter of 2 mm., faintly visible on the under side of the leaf; pycnidia few, scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 100–140 μ; spores ellipsoid, filled with granules, 3–4 $\times$ 5–8 μ.

ON RUBIACEAE:
Cephalanthus occidentalis L., Texas.
TYPE LOCALITY: Conroe, Texas, on *Cephalanthus occidentalis*.
DISTRIBUTION: Known only from the type locality.

160. **Phyllosticta Hesperidearum** (Catt.) Penzig, Michelia 2: 425. 1882.

Phoma Hesperidearum Catt. Arch. Lab. Bot. Critt. Pavia 2–3: 366. 1879.

Spots circular, irregular or sinuous, brown becoming yellow, finally cinereous or whitish,

with a purplish-brown border, reaching a diameter of 1–3 cm.; pycnidia small, black, with a large ostiolum; spores ellipsoid, hyaline, 3.5–4 × 5–6 μ.

ON RUTACEAE:
Citrus Limonum (L.) Risso (cult.), Colorado.
TYPE LOCALITY: Europe, on *Rutaceae.*
DISTRIBUTION: Fort Collins, Colorado (in greenhouse); also in Europe.
ILLUSTRATIONS: Arch. Lab. Bot. Critt. Pavia **2–3**: *pl. 22, f. 1–2c.*

161. **Phyllosticta Chionanthi** Thüm. Myc. Univ. *1489.* 1879.

Spots subcircular or irregular in form, reddish-brown, with a slightly darker, abrupt margin, often reaching a diameter of 1 cm., paler on the under side of the leaf; pycnidia thickly scattered over the infected spot, minute, black, reaching a diameter of 80 μ; spores ellipsoid or subellipsoid, 3–4 × 5–6 μ.

ON OLEACEAE:
Chionanthus virginica L., New Jersey, West Virginia.
TYPE LOCALITY: Europe, on *Chionanthus virginica.*
DISTRIBUTION: New Jersey and West Virginia; also in Europe.

162. **Phyllosticta canescens** Ellis & Ev. Bull. Torrey Club **27**: 54. 1900.

Spots large, indefinite, often covering half of the leaf which becomes distorted and dead, at first rusty-brown, finally becoming whitish or cinereous due to the blistering of the epidermis which sometimes rubs off in spots, faintly visible on the under side of the leaf; pycnidia thickly scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 100 μ; spores ellipsoid or subellipsoid, 3–4 × 5–8 μ.

ON GROSSULARIACEAE:
?*Grossularia divaricata* (Dougl.) Coville & Britton, Idaho.
TYPE LOCALITY: Bear Creek, near Volmer, Idaho, on "*Ribes divaricatum.*"
DISTRIBUTION: Known only from the type locality.

163. **Phyllosticta Syriaca** Sacc. Michelia **1**: 136. 1878.

Spots sinuous, variable, becoming dry and whitening, later brownish; pycnidia scattered, lenticular, reaching a diameter of 50 μ; spores ovoid or ellipsoid, 3–4 × 7 μ.

ON MALVACEAE:
Hibiscus syriacus L., New York.
TYPE LOCALITY: Europe, on *Hibiscus syriacus.*
DISTRIBUTION: New York; also in Europe.

164. **Phyllosticta divergens** Sacc. Malpighia **5**: 281. 1891.

Spots subcircular (on the leaf) or wanting (on the pods), pale-yellowish when present and when absent the whole surface of the fruit discolored and yellowish; pycnidia thickly and quite evenly distributed over the infected area, subglobose; spores short-fusoid or ellipsoid, 2–3 × 6–8 μ (on the pods), described as 4 × 6–8 μ on the leaves in Europe.

ON FABACEAE:
Albizzia Lebbeck (L.) Benth., Porto Rico.
TYPE LOCALITY: Europe, on *Albizzia anthelmintica* Brongn.
DISTRIBUTION: Porto Rico; also in Europe.

165. **Phyllosticta Staphyleae** Dearness; Ellis & Ev. Proc. Acad. Phila. **1891**: 77. 1891.

Spots occurring on the capsules of the host, at first wine-colored, becoming brown or reddish-brown, rather definite in outline, often a little darker around the margin, reaching a diameter of 5 mm. to 1 cm.; pycnidia sparingly scattered, reaching a diameter of 100–150 μ, similar in color to that of the surrounding spot; spores ellipsoid or subellipsoid, hyaline becoming very faintly colored, 3 × 6–7 μ.

ON STAPHYLEACEAE:
Staphylea trifolia L., Ontario.
TYPE LOCALITY: London, Ontario, on *Staphylea trifolia*.
DISTRIBUTION: Ontario.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2680*.

166. **Phyllosticta Persicae** Sacc. Michelia 1: 147. 1878.

Spots subcircular in outline, dark-brown, marked with a number of slightly elevated, concentric lines, becoming whitish in the center, a portion of the center often breaking out, reaching a diameter of 3–5 mm.; pycnidia few, located near the center of the spot, reaching a diameter of 80–112 μ; spores quite numerous, ellipsoid, 2–2.5 $\times$ 5–7 μ.

ON AMYGDALACEAE:
Amygdalus Persica L. (*Persica vulgaris* Mill.), Nebraska, Ohio.
TYPE LOCALITY: Europe, on *Persica vulgaris*.
DISTRIBUTION: Ohio and Nebraska; also in Europe.

167. **Phyllosticta circumscissa** Cooke, Grevillea 11: 150. 1883.

Spots nearly circular in form, whitish or grayish-white, with an abrupt and slightly elevated border, reaching a diameter of 1–3 mm., becoming incised for a part of the circumference, or the incision extending entirely around the spot which then drops out, leaving a clean circular hole on account of which it is often known as the shot-hole fungus; pycnidia few, scattered over the infected spot, restricted to the upper side of the leaf; spores ellipsoid, about 2 $\times$ 4–6 μ.

ON AMYGDALACEAE:
Amygdalus Persica L. (*Persica vulgaris* Mill.), District of Columbia, New York.
Padus melanocarpa (A. Nelson) Shafer (*Prunus demissa* Walp., *Cerasus demissa melanocarpa* A. Nelson), Kansas.
Prunus americana Marsh.; California, Illinois.
Prunus sp., Florida, Maine.
TYPE LOCALITY: South Australia, on apricot [*Amygdalus Armeniaca*].
DISTRIBUTION: Maine to Florida and California; also in Europe and Australia.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3353*.

168. **Phyllosticta punctata** Ellis & Dearness, Can. Rec. Sci. 5: 268. 1893.

?*Phyllosticta Opuli* Sacc. Michelia 1: 146. 1878.

Spots small and angular or irregular, often confluent, giving rise to numerous irregular patches, whitish, the infected tissue becoming very thin and often breaking out, leaving the leaves punctured with holes, reaching a diameter of 0.5–1 mm.; pycnidia scattered over the infected spot, mostly on the upper side of the leaf, reaching a diameter of 50–100 μ; spores rather abundant, ellipsoid or subfusoid, 3 $\times$ 6–8 μ.

ON CAPRIFOLIACEAE:
Viburnum Lentago L., Ontario.
Viburnum Opulus L., Wisconsin; Ontario.
TYPE LOCALITY: Ontario, on *Viburnum Lentago*.
DISTRIBUTION: Ontario to Wisconsin; (also in Europe?).
EXSICCATI: Ellis & Ev. N. Am. Fungi *2832, 3056;* Ellis & Ev. Fungi Columb. *1245*.

169. **Phyllosticta Alcides** Sacc. Michelia 1: 135. 1878.

Phyllosticta Alcides Ellis & Kellerm. Ohio Nat. 3: 223. 1902.

Spots white or whitish, circular or subcircular in form or several coalescing and then becoming irregular, reaching a diameter of 3–4 mm., visible only on the upper side of the leaf; pycnidia few, scattered over the infected spot, black, erumpent, reaching a diameter of 100 μ; spores ellipsoid, about 3 $\times$ 6–7 μ.

ON SALICACEAE:
Populus alba L., Ohio.
Populus trichocarpa T. & G., Idaho.
TYPE LOCALITY: Europe, on *Populus alba*.
DISTRIBUTION: Ohio and Idaho; also in Europe.

170. **Phyllosticta intermixta** Seaver.

Depazea populina Fuckel, Jahrb. Ver. Nat. Nass. **15**: 46. 1860.
Phyllosticta populina Sacc. Michelia 1: 155. 1878. Not *Phyllosticta populina* Pers. 1819.

Spots angular or subcircular, becoming white or whitish, with a dark-colored margin; pycnidia numerous, prominent; spores ellipsoid or ovoid, faintly olivaceous, 2.5–3 × 5–7 μ. Often associated with *Septoria Populi*.

ON SALICACEAE:
Populus deltoides Marsh. (*Populus monilifera* Ait.), Kansas.
TYPE LOCALITY: Europe, on *Populus italica*.
DISTRIBUTION: Kansas; also in Europe.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2835*.

171. **Phyllosticta Quercus-Prini** Ellis & Ev. Proc. Acad. Phila. **1894**: 356. 1894.

Spots nearly circular in form, rather definite in outline, rusty-brown, reaching a diameter of 4–5 mm., visible on the under side of the leaf but paler than on the upper side; pycnidia scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 90–110 μ; spores ovoid or ellipsoid, often a little curved, 2–2.5 × 5–6 μ.

ON FAGACEAE:
Quercus Prinus L., West Virginia.
TYPE LOCALITY: Nuttallburg, West Virginia, on *Quercus Prinus*.
DISTRIBUTION: Known only from the type locality.

172. **Phyllosticta Castaneae** Ellis & Ev. Proc. Acad. Phila. **1894**: 357. 1894.

Spots circular or nearly so, pale yellowish-white, reaching a diameter of 2–5 mm., surrounded by a rust-red area which gradually blends off into the healthy tissue of the leaf, scarcely visible on the under side of the leaf; pycnidia few, scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 100 μ, often collapsing; spores small, ellipsoid, about 2 × 5–6 μ.

ON FAGACEAE:
Castanea dentata (Marsh.) Borkh. (*Castanea vesca* Gaertn.), District of Columbia, Maryland, West Virginia.
TYPE LOCALITY: West Virginia, on *Castanea vesca*.
DISTRIBUTION: Maryland to West Virginia.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3254*.

173. **Phyllosticta Amphipterygii** Ricker, Jour. Myc. **11**: 111. 1905.

Spots subcircular, light-brown, with a slightly raised dark reddish-brown margin, reaching a diameter of 2–8 mm., several often confluent; pycnidia scattered over the infected spot, black, on the upper side of the leaf, reaching a diameter of 55–80 μ; spores ovoid, often unequal-sided, hyaline, containing two oil-drops, 2.5–3 × 8–10 μ.

ON JULIANIACEAE:
Amphipterygium amplifolium Hemsl. & Rose (*Juliania amplifolia* Hemsl. & Rose), Jalisco.
TYPE LOCALITY: Guadalajara, Jalisco, on *Amphipterygium amplifolium*.
DISTRIBUTION: Known only from the type locality.

174. **Phyllosticta Guareae** P. Henn. Hedwigia **41**: 113. 1902.

Spots subcircular or slightly irregular, usually definite in outline, whitish in the center, grading off into yellow, finally with a dark-brown border, reaching a diameter of 5–8 mm., similar in appearance on both sides of the leaf; pycnidia minute, scattered over the infected spot, reaching a diameter of 130–180 μ; spores 2.5 × 6–7 μ.

ON MELIACEAE:
Guarea trichiloides L., Porto Rico.
TYPE LOCALITY: Sao Paulo, Brazil, on *Guarea trichiloides*.
DISTRIBUTION: Porto Rico; also in South America.

175. **Phyllosticta Mortoni** Fairman, Mycologia **5**: 247. 1913.

Spots small, circular, at first black and surrounded by an indefinite red or purple dis-

coloration of the leaf-surface, becoming whitish in the center, the purple area running into brown, reaching a diameter of 1–3 mm.; pycnidia black, sparingly scattered over the infected spot, at first covered, then erumpent, reaching a diameter of 100 μ, occurring on both sides of the leaf; spores ellipsoid, hyaline, 2.5–3 × 4.5–7 μ.

ON ANACARDIACEAE:
Mangifera indica L., Veracruz.
TYPE LOCALITY: Pueblo Viejo, Veracruz, on *Mangifera indica*.
DISTRIBUTION: Known only from the type locality.

176. **Phyllosticta araliana** E. Young, Mycologia 7: 148. 1915.

Spots subcircular in form, whitish in the center, the tissue becoming very thin and translucent, the white center surrounded by a yellowish-brown area, reaching a diameter of about 5 mm., smaller and less distinct on the under side of the leaf; pycnidia few, scattered over the central portion of the infected spot, minute, black and becoming superficial; spores ovoid, slightly pointed at one end, 2–2.5 × 7–9 μ.

ON ARALIACEAE:
Dendropanax arboreum (L.) Dec. & Planch., Cuba; Porto Rico.
TYPE LOCALITY: Maricao, Porto Rico, on *Dendropanax arboreum*.
DISTRIBUTION: Cuba and Porto Rico.

177. **Phyllosticta rhoicola** Ellis & Ev. Proc. Acad. Phila. 1894: 356. 1894.

Spots subcircular, whitish, with a dark-brown or blackish border which gradually blends off into the healthy tissue of the leaf, reaching a diameter of 4–6 mm., visible on the under side but less distinct than on the upper surface; pycnidia few, scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 100–110 μ; spores very numerous, ellipsoid or fusoid, usually containing two oil-drops, 2–3 × 5–6 μ.

ON ANACARDIACEAE:
Toxicodendron radicans (L.) Kuntze (*Rhus radicans* L., *Rhus Toxicodendron* Michx., in part, not L.), West Virginia.
TYPE LOCALITY: Nuttallburg, West Virginia, on *Rhus Toxicodendron*.
DISTRIBUTION: Probably common though not often collected.

178. **Phyllosticta Parkinsoniae** Ellis & Ev. Proc. Acad. Phila. 1891: 77. 1891.

Spots small, nearly circular in form, with a slightly elevated border, reddish-brown to blackish, reaching a diameter of 1 mm.; pycnidia numerous, closely crowded or congested, reaching a diameter of 80–110 μ; spores ellipsoid, usually containing two small oil-drops, 2 × 4–6 μ.

ON CAESALPINIACEAE:
Parkinsonia aculeata L., Texas.
TYPE LOCALITY: San Antonio, Texas, on *Parkinsonia aculeata*.
DISTRIBUTION: Known only from the type locality.

179. **Phyllosticta Grossulariae** Sacc. Michelia 1: 136. 1878.

Spots rather small, subcircular or slightly irregular in form, whitish, with a narrow, slightly elevated rim, reaching a diameter of 2–3 mm. or rarely larger, about equally visible on either side of the leaf; pycnidia scattered over the infected spot, mainly on the upper surface of the leaf, usually not exceeding a diameter of 50 μ; spores abundant, ellipsoid or fusoid, 1.5–3.5 × 5–7 μ.

ON GROSSULARIACEAE:
Grossularia missouriensis (Nutt.) Cov. (*Ribes missouriense* Nutt.), Wisconsin.
Ribes americanum Mill. (*Ribes floridum* L'Hér.), Wisconsin; Ontario.
Ribes sp., Iowa.
TYPE LOCALITY: Europe, on *Ribes Grossularia*.
DISTRIBUTION: Ontario to Iowa; also in Europe.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2764*.

180. **Phyllosticta variabilis** Peck, Ann. Rep. N. Y. State Mus. **35**: 138. 1884.

†*Phyllosticta bicolor* Peck, Ann. Rep. N. Y. State Mus. **43**: 72. 1890.

Spots subcircular or slightly irregular, dark-brown, rather abruptly separated from the healthy tissue of the leaf, reaching a diameter of 4–5 mm., rarely larger, visible on both sides of the leaf but paler on the under side; pycnidia numerous, scattered over the infected spot, restricted to the upper side of the leaf; spores ellipsoid, 2.5–3 × 5–7 μ.

ON ROSACEAE:
Rubacer odoratus (L.) Rydb. (*Rubus odoratus* L.), New York.
TYPE LOCALITY: Albany, New York, on *Rubus odoratus*.
DISTRIBUTION: New York.
EXSICCATI: Barth. Fungi Columb. *4048*.

181. **Phyllosticta Baccharidis** Dearness & House; House, Bull. N. Y. State Mus. 179: 29. 1915.

Spots subcircular, bounded by the large veinlets of the leaf, flesh-colored to pale-ferruginous, usually similar in appearance on either side of the leaf, but occasionally visible only on the upper side, with a slightly raised border of the same color as the spot, about 2–6 × 3–8 mm.; pycnidia dark, occurring on both sides of the leaf but more numerous on the upper surface, as many as thirty on a single spot, subglobose or occasionally hysteriiform, reaching a diameter of 50–115 μ, but averaging about 75 μ; spores hyaline, reniform, often with an oil-drop at either end, 3 × 4–6 μ.

ON CARDUACEAE:
Baccharis halimifolia L., New York.
TYPE LOCALITY: Orient Point, Long Island, on *Baccharis halimifolia*.
DISTRIBUTION: Known only from the type locality.

182. **Phyllosticta Stillingiae** Ellis & Ev. Jour. Myc. **3**: 130. 1887.

Spots usually subcircular or more rarely irregular, rather definite in outline, rusty-brown with a darker border, usually reaching a diameter of 2–3 mm., rarely larger, about equally visible on either side of the leaf; pycnidia quite evenly scattered over the infected spot, reaching a diameter of 100–120 μ; spores abundant, ellipsoid or subfusoid, 2.5–3 × 5–8 μ.

ON EUPHORBIACEAE:
Sapium sebiferum (L.) Roxb. (*Stillingia sebifera* Michx.), Louisiana.
TYPE LOCALITY: Point a la Hache, Louisiana, on *Stillingia sebifera*.
DISTRIBUTION: Known only from the type locality.

183. **Phyllosticta biformis** Heald & Wolf, Mycologia **3**: 7. 1911.

Spots circular or subcircular in form, grayish, with a black margin, reaching a diameter of 2–5 mm.; pycnidia globose or subglobose on the leaves and lenticular on the fruit, reaching a diameter of 150 μ; spores abundant, granular within, reaching a length of 6–9 μ.

ON EBENACEAE:
Diospyros texana Scheele, Texas.
TYPE LOCALITY: Austin, Texas, on *Diospyros texana*.
DISTRIBUTION: Texas.

184. **Phyllosticta Sassafrasa** Cooke, Greville **12**: 26. 1883.

Spots circular or subcircular in form, brown; pycnidia numerous, scattered over the infected spot, reaching a diameter of 100 μ; spores ellipsoid-lanceolate, hyaline, 1.5 × 7 μ. (The specimens examined being sterile, the spore-measurements given above are on the authority of the author of the species.)

ON LAURACEAE:
Sassafras Sassafras (L.) Karst. (*Sassafras officinale* Nees & Eberm.), Georgia, New York, Pennsylvania, South Carolina.
TYPE LOCALITY: South Carolina, on *Sassafras officinale*.
DISTRIBUTION: New York to Georgia.
EXSICCATI: Rav. Fungi Am. *515;* Ellis & Ev. N. Am. Fungi *1722;* Wilson & Seaver, Ascom. *21*.

185. **Phyllosticta minima** (Berk. & Curt.) Ellis & Ev. N. Am. Phyllost. 1. 1900.

Sphaeropsis minima Berk. & Curt.; Berk. Grevillea **3**: 2. 1874.
?*Depazea brunnea* Berk. & Curt.; Berk. Grevillea **4**: 155. 1876.
Phyllosticta acericola Cooke & Ellis, Grevillea **8**: 11. 1879.

Spots circular or subcircular in form, rarely exceeding a diameter of 5 mm. and often much smaller, at maturity consisting of a yellowish central portion bounded by a reddish or purplish border, the whole having a decidedly eye-like appearance, the color of the outer border often changing to dark-brown in dried specimens; pycnidia numerous and usually distributed rather evenly over the entire spot, visible on both sides of the leaf but more prominent on the upper surface and apparently opening upward but occasionally opening downward, reaching a diameter of 100–125 μ, the ostiolum fairly prominent; spores ellipsoid with the ends blunt, usually about 2 × 6 μ but occasionally reaching a length of 10 μ.

ON ACERACEAE:
Acer rubrum L., Alabama, Florida, Louisiana, New Jersey, New York, Pennsylvania; Ontario.
Acer saccharinum L. (*Acer dasycarpum* Ehrh.), Kansas, Missouri, Nebraska, New Jersey, Wisconsin.
Acer spicatum Lam., Wisconsin.
TYPE LOCALITY: New England, on *Acer rubrum*.
DISTRIBUTION: Ontario to Florida, and westward to Nebraska and Louisiana.
EXSICCATI: Ellis, N. Am. Fungi *534, 660;* Ellis & Ev. Fungi Columb. *140;* Barth. Fungi Columb. *3830, 4246;* Rab.-Wint. Fungi Eur. *3392;* Roum. Fungi Gall. *3845.*

186. **Phyllosticta Tiliae** Sacc. & Speg; Sacc. Michelia **1**: 158. 1878.

Spots circular or subcircular in form, whitish with a dark brownish or purplish border, reaching a diameter of 3–4 mm., visible on both sides of the leaf but less distinct on the under surface; pycnidia few, scattered over the infected spot, reaching a diameter of 120 μ; spores rather numerous, ellipsoid, about 3 × 5–8 μ.

ON TILIACEAE:
Tilia americana L., West Virginia.
TYPE LOCALITY: Europe, on *Tilia europaea*.
DISTRIBUTION: West Virginia; also in Europe.

187. **Phyllosticta fimbriata** Ellis & Ev. Bull. Torrey Club **24**: 286. 1897.

Spots occasionally circular but more often irregular in form, cinereous or dark-brown, surrounded by a slightly elevated border, reaching a diameter of 4–5 mm., visible on the under side of the leaf but there rusty-brown; pycnidia restricted to the upper side of the leaf, few, reaching a diameter of 200–300 μ, fringed about the base with straight, spreading, simple, septate hairs which reach a length of 50–75 μ and a diameter of 5 μ; spores 1.5–3 × 4–6 μ.

ON ERICACEAE:
Arbutus Menziesii Hook., Oregon.
TYPE LOCALITY: Ashland, Oregon, on *Arbutus Menziesii*.
DISTRIBUTION: Known only from the type locality.

188. **Phyllosticta agrifolia** Ellis & Ev. Erythea **1**: 146. 1893.

Spots at first terminal or marginal on the leaf, pale-yellowish with a narrow dark-brown border, spreading until they often cover the entire leaf which becomes yellowish-brown and dead; pycnidia conspicuous and evenly scattered over the infected spot, occurring on either side but more abundant on the upper side of the leaf, erumpent through the epidermis, the upraised epidermis being plainly visible, subglobose, reaching a diameter of 150–200 μ; spores abundant, ellipsoid or subellipsoid, often narrowed at one or both ends, 2–2.5 × 7–10 μ.

ON FAGACEAE:
Quercus agrifolia Née, California.
Quercus chrysolepis Liebm., California.
TYPE LOCALITY: Berkeley, California, on *Quercus agrifolia*.
DISTRIBUTION: California.

189. **Phyllosticta ludoviciana** Ellis & Mart. Jour. Myc. **2**: 130. 1886.

Phyllosticta marginalis Ellis & Ev. Jour. Myc. **4**: 9. 1888.
Phyllosticta apiculata Sacc. & Syd. in Sacc. Syll. Fung. **14**: 865. 1899.

Spots subcircular or irregular in form, internal or usually marginal, reaching a diameter of 1 cm., rusty-brown, pycnidia scattered over the infected area, flattened, erumpent, reaching a diameter of 150 μ; spores rather abundant, ellipsoid or fusoid, 2–3 × 5–8 μ.

On FAGACEAE:
Quercus nigra L. (*Quercus aquatica* Walt.), Louisiana.
TYPE LOCALITY: Louisiana, on *Quercus aquatica*.
DISTRIBUTION: Louisiana.

190. **Phyllosticta virens** Ellis & Langlois, Jour. Myc. **6**: 36. 1890.

Spots rather irregular but usually definite in outline, pale grayish-brown, surrounded by a dark line, reaching a diameter of 1 cm., causing the under side of the leaf to become blistered; pycnidia numerous, thickly scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 100 μ; spores ellipsoid or subfusoid, 1.5–2.5 ×4–7 μ.

On FAGACEAE:
Quercus virginiana Mill. (*Quercus virens* Ait.), Louisiana.
TYPE LOCALITY: Louisiana, on *Quercus virens*.
DISTRIBUTION: Louisiana.

191. **Phyllosticta Heteromeles** Cooke & Hark. Grevillea **9**: 84. 1881.

Spots marginal or internal, subcircular or irregular and often occupying half the surface of the leaf, cinereous or whitish, surrounded or partially surrounded by a slightly elevated border and often marked with concentric rings, a little paler on the under side of the leaf; pycnidia numerous, scattered over the infected spot, rather large, reaching a diameter of 130–200 μ; spores numerous, ellipsoid or subfusoid, 2 × 8 μ.

On ROSACEAE:
Heteromeles arbutifolia Roem., California.
TYPE LOCALITY: California, on *Heteromeles arbutifolia*.
DISTRIBUTION: California.
EXSICCATI: Ellis, N. Am. Fungi *751*; Ellis & Ev. Fungi Columb. *767*.

192. **Phyllosticta zonata** Ellis & Ev. Bull. Torrey Club **27**: 54. 1900.

Spots irregular, reddish-brown, zonate, definite in outline, with the margin slightly elevated and a little darker, reaching a diameter of 2–10 mm. or confluent and covering a large portion of the leaf; pycnidia minute, covered by a thin whitish epidermis, occurring on the upper side of the leaf; spores ellipsoid, 1.5–2 × 4–6 μ.

On MALACEAE:
Malus ioensis (Wood) Britton (*Pyrus ioensis* Carr.), Iowa.
TYPE LOCALITY: Iowa, on *Pyrus ioensis*.
DISTRIBUTION: Iowa.
EXSICCATI: Ellis & Ev. Fungi Columb. *1444*.

193. **Phyllosticta Dircae** Ellis & Dearness, Can. Rec. Sci. **5**: 267. 1893.

Spots circular or subcircular in form, yellowish-brown in the center, brownish-black about the margin, faintly marked with concentric rings, reaching a diameter of 5–10 mm., the center becoming thin and often breaking out; pycnidia numerous, scattered over the entire spot, opening on the upper side of the leaf but visible on the under surface also, reddish-brown to blackish, reaching a diameter of 60–100 μ; spores narrow-ellipsoid, 2 × 7 μ.

On THYMELAEACEAE:
Dirca palustris L., Ontario.
TYPE LOCALITY: London, Ontario, on *Dirca palustris*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2838*.

194. **Phyllosticta innumerabilis** Peck, Bull. Torrey Club 36: 336. 1909.

Spots large, suborbicular or irregular, often covering more than half the leaf, brownish, the brown color gradually blending off into the healthy tissue of the leaf, visible on both sides of the leaf but more conspicuous on the under side; pycnidia numerous, scattered over the infected spot, restricted to the under side of the leaf, yellowish, reaching a diameter of 80–100 μ; spores 1.5 × 6–8 μ, on long sporophores about 1 × 10–20 μ.

ON MALACEAE:
Amelanchier alnifolia Nutt., Nebraska.
Amelanchier sp., Nebraska.
TYPE LOCALITY: Fort Niobrara, Nebraska, on *Amelanchier* sp.
DISTRIBUTION: Nebraska.
EXSICCATI: Barth. Fungi Columb. *2948*.

195. **Phyllosticta moricola** Ellis & Ev. Proc. Acad. Phila. 1893: 455. 1894.

Spots large, irregular in form, reddish-brown at first, then whitening out but with a brick-red margin; pycnidia subdiscoid, brown, perforated above, reaching a diameter of 100–110 μ; spores subellipsoid or clavate-ellipsoid, containing two oil-drops, 2.5–3 × 5–8 μ.

ON ARTOCARPACEAE:
Morus rubra L., Kansas.
TYPE LOCALITY: Belvue, Kansas, on *Morus rubra*.
DISTRIBUTION: Known only from the type locality.

196. **Phyllosticta Caryae** Peck, Ann. Rep. N. Y. State Mus. 40: 57. 1887.

Phyllosticta Caryae Ellis & Ev. Jour. Myc. 4: 101. 1888.
Phyllosticta caryogena Sacc. Syll. Fung. 10: 119. 1892.

Spots irregular, often confluent, at first yellowish, then brown, sometimes becoming grayish, reaching a diameter of 1 cm. or more, often occurring on old insect-galls, occasionally deciduous; pycnidia minute, reaching a diameter of 100 μ, occurring on the upper side of the leaf; spores irregularly ellipsoid, 2 × 5 μ.

ON JUGLANDACEAE:
Hicoria aquatica (Michx.) Britton (*Carya aquatica* Nutt.), Louisiana.
Hicoria ovata (Mill.) Britton (*Carya alba* Nutt.), Florida, Illinois, New York, Wisconsin; Ontario.
Hicoria sp., Delaware, Florida, Michigan, Minnesota, New Jersey, Ohio, Texas, West Virginia.
TYPE LOCALITY: Piffard, New York, on *Carya alba*.
DISTRIBUTION: Maine to Florida, Minnesota and Texas.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2155*, *2677*; Barth. Fungi Columb. *2649*, *4045*.

197. **Phyllosticta apicalis** Davis, Trans. Wis. Acad. 16: 761. 1909.

Spots brown, occupying one half to three fourths of the distal portion of the leaf, extending further along the midrib and as a result becoming wedge-shaped at the base, with no definite margin; pycnidia numerous, amphigenous, dark-brown or black, with a large ostiolum; spores ellipsoid, 1–3 × 4–7 μ.

ON SALICACEAE:
Salix lucida Muhl., Wisconsin.
TYPE LOCALITY: Dousman, Wisconsin, on *Salix lucida*.
DISTRIBUTION: Known only from the type locality.

198. **Phyllosticta Magnoliae** Sacc. Michelia 1: 139. 1878.

Spots subcircular or often very irregular in outline, either in the center or at the margins of the leaves and sometimes covering more than half of the leaf-surface, yellowish on the under side of the leaf but silvery-white on the upper surface, surrounded by a narrow, dark-brownish or black ring, reaching a diameter of 1 to several cm.; pycnidia rather abundant and evenly

distributed over the infected spot, erumpent through the thin epidermis, restricted to the upper side of the leaf, rather large, reaching a diameter of 300–400 μ; spores minute, narrow-ellipsoid, about 2–2.5 × 6–7 μ.

ON MAGNOLIACEAE:
?Magnolia Fraseri Walt., West Virginia.
Magnolia glauca L., New Jersey.
Magnolia grandiflora L., Florida, Louisiana, Mississippi.
TYPE LOCALITY: Europe, on *Magnolia grandiflora.*
DISTRIBUTION: New Jersey to Florida and Mississippi; also in Europe.
ILLUSTRATIONS: E. & P. Nat. Pfl. 1[1]: *f. 183, a-c.*

199. **Phyllosticta micropuncta** Cooke, Jour. Linn. Soc. **17:** 142. 1878.

Phyllosticta Perseae Ellis & Martin, Jour. Myc. **1**: 100. 1885.

Spots subcircular or slightly irregular, sometimes terminal or marginal, brownish to cinereous, with a dark-brown border, rather definite in outline, reaching a diameter of 1 cm., visible on the under side of the leaf but paler; pycnidia numerous, quite evenly scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 150–300 μ, brownish-black, erumpent; spores ovoid or ellipsoid, 1–3 × 3–8 μ.

Accompanied by an ascomycete which may represent its perfect stage.

ON LAURACEAE:
Laurus sp., Texas.
Persea Borbonia (L.) Spreng. (*Persea carolinensis* Nees), District of Columbia, Louisiana.
TYPE LOCALITY: Texas, on *Persea carolinensis.*
DISTRIBUTION: District of Columbia, Louisiana, and Texas.

200. **Phyllosticta Meliae** Ellis & Ev. Jour. Myc. **4**: 9. 1888.

Spots marginal or terminal, usually confined to a narrow strip partially or entirely surrounding the leaf, pale-yellowish or whitish, with a narrow, brown border which separates the infected area rather abruptly from the healthy tissue of the leaf; pycnidia quite regularly scattered over the infected spot, usually on the under side of the leaf, conspicuous, black, flattened, reaching a diameter of 150 μ; spores ellipsoid or subfusoid, about 1–2 × 4–5 μ.

ON MELIACEAE:
Melia Azedarach L., Louisiana.
TYPE LOCALITY: Point a la Hache, Louisiana, on *Melia Azedarach.*
DISTRIBUTION: Known only from the type locality.

201. **Phyllosticta bixina** E. Young, Mycologia **7**: 148. 1915.

Spots subcircular or irregular, sometimes covering a large part of the leaf, pale-yellowish, usually surrounded by a dark purplish-black border, with a yellowish area outside of this which gradually blends off into the healthy tissue of the leaf, reaching a diameter of 5 mm. to 1 cm., visible on both sides of the leaf but more distinct on the upper surface; pycnidia few, globose, reaching a diameter of 90–150 μ; spores ovoid, 2.5 × 4–6 μ.

ON BIXACEAE:
Bixa Orellana L., Porto Rico.
TYPE LOCALITY: Maricao, Porto Rico, on *Bixa Orellana.*
DISTRIBUTION: Porto Rico.

202. **Phyllosticta extensa** Sacc. & Syd. in Sacc. Syll. Fung. **14**: 852. 1899.

Phyllosticta Eucalypti Ellis & Ev. Bull. Torrey Club **24**: 285. 1897. Not *P. Eucalypti* Thüm. 1884.

Spots marginal, terminal or more rarely internal, usually consisting of irregular blotches, thicker than the healthy tissue, the infected area spreading until it often covers the entire leaf, yellowish; pycnidia rather evenly distributed over the infected area, immersed or becoming erumpent, reaching a diameter of 150 μ; spores abundant, ellipsoid, 2–3 × 6–7 μ.

ON MYRTACEAE:
Eucalyptus globulus Labill. (cult.), California.
TYPE LOCALITY: California, on *Eucalyptus* sp.
DISTRIBUTION: California.

203. **Phyllosticta Oxydendri** Ellis & Ev.; Millsp. & Nutt. Field Mus. Publ. Bot. **1**: 104. 1896.

Spots subcircular or ellipsoid, reddish-brown, becoming pale-yellow or whitish in the center, with a narrow, dark-brown border, the tissue in the center of the spot becoming very thin and often breaking out, reaching a diameter of 1 cm.; pycnida sparingly scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 100–200 μ; spores ellipsoid 2.5–3 × 7–8 μ.

ON VACCINIACEAE:
Oxydendron arboreum (L.) DC., West Virginia.
TYPE LOCALITY: West Virginia, on *Oxydendron arboreum*.
DISTRIBUTION: Known only from the type locality.

204. **Phyllosticta fraxinicola** (Currey) Ellis & Ev. N. Am. Phyllost. 2. 1900.

Sphaeria fraxinicola Currey, Trans. Linn. Soc. **22**: 333. 1859.
Phyllosticta Fraxini Ellis & Martin, Am. Nat. **18**: 189. 1884.
Phyllosticta variegata Ellis & Ev. Jour. Myc. **5**: 145. 1889.

Spots circular or subcircular, yellowish or pale-brown, often surrounded by a very narrow dark-brown border, reaching a diameter of about 1 cm. or several coalescing forming a compound spot or irregular blotch several cm. in diameter; pycnidia rather numerous and quite evenly distributed over the spot, occurring on the upper surface and scarcely visible on the under surface of the leaf, reaching a diameter of 150–200 μ; spores narrow ellipsoid, 2–3 × 5–7 μ.

ON OLEACEAE:
Fraxinus americana L., New York, Pennsylvania; Ontario.
Fraxinus pennsylvanica-Marsh. (*Fraxinus viridis* Michx.), Kansas.
Fraxinus sp., Illinois, Michigan, Mississippi, New Jersey, Ohio, Pennsylvania.
TYPE LOCALITY: Europe, host not named.
DISTRIBUTION: Ontario to Mississippi, Michigan, and Kansas; also in Europe.
ILLUSTRATIONS: Trans. Linn. Soc. **22**: *pl. 59, f. 148*.
EXSICCATI: Ellis, N. Am. Fungi *1163*; Ellis & Ev. N. Am. Fungi *2681*; Wilson & Seaver, Ascom. *19*

205. **Phyllosticta momisiana** E. Young, Mycologia **7**: 145. 1915.

Spots indefinite, often marginal or terminal, sometimes covering a large portion of the leaf, whitish or pale-yellowish; pycnidia numerous, mostly on the upper surface of the leaf, dark-brown, subglobose, reaching a diameter of 48–60 μ; spores hyaline, ovoid or ellipsoid, 2–2.5 × 4–7 μ.

ON ULMACEAE:
Momisia iguanaea (Jacq.) Rose & Standley, Porto Rico.
TYPE LOCALITY: Coamo, Porto Rico, on *Momisia iguanaea*.
DISTRIBUTION: Known only from the type locality.

206. **Phyllosticta Pithecolobii** E. Young, Mycologia **7**: 145. 1915.

Phyllosticta Pithecolobii monensis E. Young, Mycologia **7**: 145. 1915.

Spots circular or nearly so, pale-yellow, surrounded by a slightly elevated, dark-brown rim, faintly visible on the under side of the leaf, reaching a diameter of 5–10 mm.; pycnidia rather evenly scattered over the infected area, conspicuous, black, reaching a diameter of 100–200 μ; spores ellipsoid or subellipsoid, 2–2.5 × 4–7 μ.

ON MIMOSACEAE:
Pithecolobium Unguis-cati (L.) Benth., Porto Rico.
TYPE LOCALITY: Desecheo, Porto Rico, on *Pithecolobium Unguis-cati*.
DISTRIBUTION: Porto Rico.

207. **Phyllosticta Haynaldi** Roum. & Sacc.; Sacc. Michelia **2**: 342. 1881.

Spots indefinite in outline, often covering a good part of the leaf, slightly rose-colored,

becoming brown in dried specimens; pycnidia densely gregarious or sparse, reaching a diameter of 120 μ; spores ovoid, minute, containing two oil-drops, 2–3 × 5–8 μ.

ON AQUIFOLIACEAE:
Ilex verticillata (L.) A. Gray, West Virginia.
TYPE LOCALITY: Europe, on *Ilex Aquifolium* L.
DISTRIBUTION: West Virginia; also in Europe.

208. **Phyllosticta concomitans** Ellis & Ev. Jour. Myc. **4**: 9. 1888.

Spots occurring on either side of the leaf, irregular in form, definite in outline, white or whitish, with a very narrow raised border, outside of which is a purplish area, the tissue becoming thin and finally breaking out, reaching a diameter of 2–3 mm.; pycnidia minute, scattered, immersed, visible on both sides of the leaf but opening above; spores ellipsoid, 1.5–2 × 5–7 μ.

ON AQUIFOLIACEAE:
Ilex decidua Walt., Louisiana (?).
TYPE LOCALITY Louisiana (?), on *Ilex decidua*, with *Amerosporium ilicinum* Ellis & Ev.
DISTRIBUTION: Known only from the type locality;

209. **Phyllosticta Celastri** Ellis & Ev.; Millsp. & Nutt. Field Mus. Publ. Bot. **1**: 104. 1896.

Spots usually marginal, subsemicircular in form, reddish-brown, pale-yellowish in the center, the dark portion variegated and marked with concentric rings, the whole spot sharply defined and reaching a diameter of 1 cm., similar in appearance on the under side of the leaf but paler; pycnidia numerous, scattered over the central area of the infected spot, flattened and brownish, reaching a diameter of 100–150 μ; spores numerous, ellipsoid, 2–2.5 × 5–7 μ.

ON CELASTRACEAE:
Celastrus scandens L. West Virginia
TYPE LOCALITY: West Virginia, on *Celastrus scandens*.
DISTRIBUTION: Known only from the type locality.

210. **Phyllosticta Euonymi** Sacc. Michelia **1**: 155. 1878.

Spots usually irregular in form, white or whitish, surrounded by a dark-purple area which gradually blends off into the healthy tissue of the leaf, reaching a diameter of 1 cm. or occasionally more, equally visible on either side of the leaf; pycnidia scattered over the infected spot, reaching a diameter of 100 μ; spores ellipsoid or fusoid, rather variable in size but usually about 3 × 4–8 μ.

ON CELASTRACEAE:
Euonymus atropurpureus Jacq., Delaware.
TYPE LOCALITY: Europe, on *Euonymus europaeus*.
DISTRIBUTION: Delaware; also in Europe.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2675*.

211. **Phyllosticta Myricae** Cooke, Grevillea **6**: 136. 1878.

Spots internal or marginal, when internal subcircular, when marginal often half surrounding the leaf, reddish-brown, with a dark brownish-black border, visible on both sides of the leaf but paler on the under side; pycnidia scattered over the infected spot, restricted to the upper side of the leaf; spores ellipsoid or subfusoid, 2–3 × 4–7 μ.

ON MYRICACEAE:
Myrica carolinensis Mill., New York.
Myrica cerifera L., Florida, New Jersey, South Carolina.
TYPE LOCALITY: Aiken, South Carolina, on *Myrica cerifera*.
DISTRIBUTION: New York to Florida.
EXSICCATI: Ellis, N. Am. Fungi *535;* Ellis & Ev. Fungi Columb. *273;* Rav. Fungi Am. *154*.

212. **Phyllosticta Coryli** Westend. Bull. Acad. Belg. **19**[3]: 121. 1852.

Spots subcircular or more often irregular in form, light yellowish-brown in the center, darker around the outer margin, often giving rise to irregular dead patches about the margin

of the leaf; pycnidia few, scattered, minute; spores scant, 2–3.5 × 7–8 μ (often difficult to find in material examined).

ON BETULACEAE:
Corylus americana Walt., Missouri.
Corylus rostrata Ait., Washington; Ontario.
TYPE LOCALITY: Europe, on *Corylus Avellana*.
DISTRIBUTION: Ontario, Missouri, and Washington; also in Europe.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2682*.

213. **Phyllosticta mahoniaecola** Pass.; Brunaud, Rev. Myc. 8: 140. 1886.

Spots large, indefinite, finally occupying the entire leaf; pycnidia scattered, occurring on the upper side of the leaf, covered with the epidermis of the leaf, finally slightly erumpent; spores ellipsoid, hyaline, containing two oil-drops, 2.5 × 7.5–8 μ.

ON BERBERIDACEAE:
Mahonia sp., New York.
TYPE LOCALITY: Europe, on *Mahonia japonica*.
DISTRIBUTION: New York; also in Europe.

214. **Phyllosticta altheina** Sacc. Michelia 1: 143. 1878.

Spots irregular and rather indefinite, yellowish-brown and surrounded by a pale-yellowish area, the main spot reaching a diameter of 2–3 cm., visible on either side of the leaf but more distinct on the upper side; pycnidia numerous and thickly scattered over the infected area, reaching a diameter of 100–125 μ, the ostiolum large and conspicuous; spores ellipsoid, about 3 × 6–8 μ.

ON MALVACEAE:
Althaea rosea Cav., West Virginia.
TYPE LOCALITY: Europe, on *Althaea rosea*.
DISTRIBUTION: West Virginia; also in Europe.

215. **Phyllosticta hederaecola** Dur. & Mont.; Mont. Syll. Crypt. 279. 1856.

Spots subcircular, occurring on the upper side of the leaf, dry, becoming white, with a brown margin, reaching a diameter of 1–2 cm.; pycnidia prominent; spores ellipsoid, containing two oil-drops, 2.5 × 6 μ.

ON ARALIACEAE:
Hedera Helix L. (cult.), New Jersey.
TYPE LOCALITY: Algeria, on *Hedera* sp.
DISTRIBUTION: New Jersey; also in Europe and North Africa.

216. **Phyllosticta latifolia** Ellis & Ev, Proc. Acad. Phila. 1893: 454. 1894.

Spots subcircular or ellipsoid, reddish-brown, rather distinctly marked with concentric lines, surrounded by a dark-brown or brownish-black border which gradually blends off into the healthy tissues of the leaf, reaching a length of 1 cm. or more and about half as broad, visible on both sides of the leaf but more distinct on the upper side; pycnidia few, sparingly scattered over the surface of the infected area, restricted to the upper side of the leaf, reaching a diameter of 150–200 μ; spores abundant, long-ellipsoid, 2–3 × 6–8 μ.

ON ERICACEAE:
Kalmia latifolia L., Mississippi, New Jersey.
TYPE LOCALITY: Newfield, New Jersey, on *Kalmia latifolia*.
DISTRIBUTION: New Jersey and Mississippi.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2938*.

217. **Phyllosticta caricicola** Sacc. & Scalia; Sacc. Harriman Alaska Exp. Crypt. 21. 1904.

Spots becoming dry, indefinite in outline, mostly on the under side of the leaf; pycnidia

minute, black, globose-depressed, reaching a diameter of 50–80 μ, loosely arranged in rows, the walls composed of polyhedral cells, 6–8 μ in diameter; spores oblong-bacilliform, 0.5 × 4–5 μ.

ON CYPERACEAE:
Carex sp., Alaska.
TYPE LOCALITY: Orca, Alaska, on *Carex* sp.
DISTRIBUTION: Known only from the type locality.
ILLUSTRATIONS: Harriman Alaska Exp. Crypt. *pl. 6, f. 18.*

218. **Phyllosticta melanoplaca** Thüm. Bull. Soc. Nat. Mosc. 55[1]: 230. 1880.

Phyllosticta Fraserae Ellis & Ev. N. Am. Phyllost. 47. 1900.

Spots several cm. long and 3–4 mm. wide, blackish or with a slight reddish tint, visible on both sides of the leaf but paler on the under surface; pycnidia very numerous, thickly scattered over the surface of the infected spot, so numerous as to give the spot a blackish appearance, reaching a diameter of 100 μ; spores abundant, minute, 1–2 × 2–5 μ.

ON MELANTHIACEAE:
Veratrum speciosum Rydb., Colorado, Utah (the host incorrectly determined as *Frasera* sp.).
TYPE LOCALITY: Siberia, on *Veratrum album* L.
DISTRIBUTION: Colorado and Utah; also in Europe and Asia.
EXSICCATI: Barth. Fungi Columb. *2250.*

219. **Phyllosticta vagans** Peck, Ann. Rep. N. Y. State Mus. 40: 58. 1887.

Spots wanting or indefinite, often covering the entire leaf which turns yellow; pycnidia scattered over the entire surface of the infected spot, minute, reaching a diameter of 75–90 μ; spores very minute, rod-like, 1 × 3 μ.

ON CONVALLARIACEAE:
Vagnera racemosa (L.) Morong (*Convallaria racemosa* L., *Smilacina racemosa* Desf.), New York.
TYPE LOCALITY: Conklingville, New York, on *Smilacina racemosa.*
DISTRIBUTION: Known only from the type locality.

220. **Phyllosticta hispida** Ellis & Dearness, Proc. Can. Inst. IV. 1: 91. 1897.

Leaf-surface becoming discolored but with no definite spots; pycnidia scattered over the entire surface of the leaf but more congested in places, minute, reaching a diameter of 75–90 μ, visible on both sides of the leaf but apparently opening below; spores minute, rod-shaped, straight or slightly curved and allantoid, 1–1.5 × 3–4 μ.

ON SMILACACEAE:
Smilax hispida L., Ontario.
TYPE LOCALITY: London, Ontario, on *Smilax hispida.*
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3541.*

221. **Phyllosticta typhina** Sacc. & Malbr.; Sacc. Michelia 2: 88. 1880.

Phyllosticta Renouana Sacc. & Roum. Rev. Myc. 6: 32. 1884.

Spots elongate and rather indefinite in form, often reaching a length of 1 cm. or more, cinnamon-brown or reddish, becoming pale in the center; pycnidia reaching a diameter of 100–110 μ, globose-lenticular; spores ellipsoid. 2 × 4 μ.

ON TYPHACEAE:
Typha latifolia L., Nebraska, New York.
TYPE LOCALITY: Europe, on *Typha* sp.
DISTRIBUTION: New York and Nebraska; also in Europe.

222. **Phyllosticta Caricis** (Fuckel) Sacc. Syll. Fung. 3: 61. 1884.

Ascochyta Caricis Fuckel, Fungi Rhen. *1697,* 1866.

Spots consisting of irregular dark-colored blotches scattered over a yellowish discolored

area which varies in size but often covers a large portion of the leaf, about equally conspicuous on either side of the leaf; pycnidia sparingly scattered over the spots, restricted to the under side of the leaf, minute but rather conspicuous, black; spores rod-shaped or allantoid, about $2 \times 6\ \mu$.

ON CYPERACEAE:
Carex intumescens Rudge, Wisconsin.
Carex pennsylvanica Lam., New York.
Carex trisperma Dewey, Wisconsin.
Carex sp., New York.
TYPE LOCALITY: Europe, on *Carex muricata*.
DISTRIBUTION: New York and Wisconsin, also in Europe.

223. **Phyllosticta Xanthosomatis** Sacc. Ann. Myc. 11: 548. 1913.

Spots subcircular, occurring on the upper side of the leaf, yellowish, reaching a diameter of 7–10 mm.; pycnidia gregarious, 70–80 μ, with a large, conspicuous ostiolum; spores ellipsoid-fusoid, dilutely greenish, about $2.5 \times 4\ \mu$.

ON ARACEAE:
Xanthosoma sp., Mexico.
TYPE LOCALITY: Oaxaca, Mexico, on *Xanthosoma* sp.
DISTRIBUTION: Known only from the type locality.

224. **Phyllosticta Maurandiae** Dearness & House; House, Bull. N. Y. State Mus. 179: 34. 1915.

Spots circular or subcircular, white, the substance thin with a raised border but no contiguous discoloration, scattered, small, reaching a diameter of 1–2 mm.; pycnidia rather numerous, as many as 21 on a spot, visible on both sides of the leaf, subglobose, reddish, reaching a diameter of 90–150 μ; spores hyaline, flattened, oval, minute, 1×3.5–$4\ \mu$ when measured on their edges, 2.75–3×3.5–$4\ \mu$ when measured on their face, containing two oil-drops.

ON SCROPHULARIACEAE:
Maurandia semperflorens Ort., Oaxaca, on *Maurandia semperflorens*.
TYPE LOCALITY: Monte Alban, Oaxaca, on *Maurandia semperflorens*.
DISTRIBUTION: Known only from the type locality.

225. **Phyllosticta Oxalidis** Sacc. Michelia 1: 142. 1878.

Spots variable in form, becoming dry and whitish, with a brownish margin; pycnidia few, scattered, globose-lenticular; spores globose-ovoid, $3 \times 4\ \mu$.

ON OXALIDACEAE:
Xanthoxalis stricta (L.) Small (*Oxalis stricta* L.), Wisconsin.
TYPE LOCALITY: Europe, on *Oxalis Acetosella*.
DISTRIBUTION: Wisconsin; also in Europe.

226. **Phyllosticta Heraclei** Ellis & Dearness, Proc. Can. Inst. IV. 1: 91. 1897.

Spots indefinite, reddish-brown, becoming pale toward the margin and gradually blending off into the healthy tissue of the leaf, reaching a diameter of 1–2 cm., later often becoming confluent and covering a large part of the leaf, similar in color on both sides of the leaf; pycnidia sparingly scattered or occasionally congested, usually restricted to the upper side of the leaf, reaching a diameter of 110–125 μ; spores rather minute, ellipsoid or rod-like, $2 \times 4\ \mu$.

ON AMMIACEAE:
Heracleum lanatum Michx., Ontario.
TYPE LOCALITY: London, Ontario, on *Heracleum lanatum*.
DISTRIBUTION: Known only from the type locality.

227. **Phyllosticta Apii** Halsted, Ann. Rep. N. J. Exp. Sta. 12: 253. 1892.

Spots indefinite and irregular in form, usually occurring near the margin of the leaf yellowish-brown, reaching a diameter of 1 cm., the infected tissue becoming very thin and

often breaking out, leaving the leaf with a ragged edge; pycnidia sparingly scattered over the infected spot, suberumpent, reaching a diameter of 100–150 μ; spores ellipsoid or subellipsoid, reaching a size of 2 × 4 μ.

ON AMMIACEAE:
Celeri graveolens (L.) Britton (*Apium graveolens* L.), New Jersey.
TYPE LOCALITY: New Jersey, on *Apium graveolens*.
DISTRIBUTION: Known only from the type locality.
ILLUSTRATIONS: Ann. Rep. N. J. Exp. Sta. **12**: 253, *f. 2–4*.

228. **Phyllosticta Mulgedii** Davis, Trans. Wis. Acad. **16**: 761. 1909.

Spots irregular, dark-brown, indefinite, reaching a diameter of 1–3 cm.; pycnidia occurring on the upper side of the leaf, inconspicuous, scattered, brown, globose, reaching a diameter of 75–100 μ; spores ellipsoid to oblong-globose, mostly with two oil-drops, about 3 × 3–7 μ.

ON CICHORIACEAE:
Lactuca spicata (Lam.) Hitchc. (*Lactuca leucophaea* A. Gray), Wisconsin.
TYPE LOCALITY: Racine, Wisconsin, on *Lactuca leucophaea*.
DISTRIBUTION: Known only from the type locality.

229. **Phyllosticta eupatoriicola**; Bubák & Kabât; Ķabât & Bubák, Hedwigia **46**: 288. 1907.

Spots irregular and not very distinct, at least in dried specimens, reaching a diameter of 5 mm.; pycnidia scattered over the infected area, subglobose, reaching a diameter of 80–85 μ; spores minute, 1–3 × 3–4 μ.

ON CARDUACEAE:
Eupatorium odoratum L., Porto Rico.
TYPE LOCALITY: Europe, on *Eupatorium cannabinum*.
DISTRIBUTION: Porto Rico; also in Europe.

230. **Phyllosticta Clematidis** Ellis & Dearness, Can. Rec. Sci. **5**: 268. 1893.

Spots marginal, yellowish or whitish, semicircular, with a reddish-brown border, often breaking out and leaving the margin of the leaf ragged, reaching a diameter of 3 mm., about equally visible on either side of the leaf; pycnidia few, scattered, subglobose, reaching a diameter of 50–80 μ; spores few, ellipsoid, 3 × 4–6 μ.

ON RANUNCULACEAE:
Viorna Viorna (L.) Small (*Clematis Viorna* L.), Ontario.
TYPE LOCALITY: London, Ontario, on *Clematis Viorna*.
DISTRIBUTION: Known only from the type locality.

231. **Phyllosticta perforans** Ellis & Ev. Proc. Acad. Phila. **1893**: 157 1893.

Spots circular or subcircular in form, the tissue of the infected spot becoming thin and translucent and often breaking out, leaving the leaf punctured with holes (the spots being identical in general appearance with *P. decidua*); pycnidia scattered over the infected area, subglobose with a conspicuous ostiolum, reaching a diameter of 100–120 μ; spores small, ellipsoid, about 2 × 3–5 μ.

Leptosphaeria Solani Ellis & Ev. occurs on the same spots and may represent the perfect stage of this fungus.

ON SOLANACEAE:
Solanum Dulcamara L., Ontario.
TYPE LOCALITY: London, Ontario, on *Solanum Dulcamara*.
DISTRIBUTION: Known only from the type locality.

232. **Phyllosticta decidua** Ellis & Kellerm. Am Nat. 17: 1165. 1883.

Phyllosticta Calaminthae Ellis & Ev. Jour. Myc. **5**: 145. 1889.
Phyllosticta Lycopodis Ellis & Ev. Proc. Acad. Phila. **1891**: 76. 1891.
Phyllosticta Monardae Ellis & Barth.; Smyth, Trans. Kansas Acad. **16**: 165. 1899.

Spots definite, circular or subcircular in form, the tissue of the infected spot becoming very thin and translucent, bounded by a slightly elevated border, reaching a diameter of 1–2 mm., the infected tissue occasionally breaking out and leaving the leaf punctured with holes; pycnidia minute, scattered over the infected spot, usually on the upper side of the leaf, nearly globose and almost superficial at maturity, with a conspicuous ostiolum which reaches a diameter of 10 μ, the pycnidium reaching a diameter of 150 μ; spores ellipsoid, about 2 × 3–5 μ.

Specimens on *Nepeta Cataria* are accompanied by a *Pleosphaerulina* which may represent its perfect stage. Specimens on *Mentha* and *Teucrium* are accompanied by a *Mycosphaerella* which appears to represent its perfect stage. If so more than one species may be represented in what has been regarded as the same *Phyllosticta* on different hosts.

ON CANNABINACEAE:
Humulus Lupulus L., Wisconsin.
ON ROSACEAE:
Agrimonia gryposepala Wallr., Wisconsin.
Agrimonia striata Michx., Wisconsin.
Geum canadense Jacq. (*Geum album* Gmel.), Wisconsin.
ON ARALIACEAE:
Aralia racemosa L., Wisconsin.
ON PRIMULACEAE:
Steironema ciliatum (L.) Raf., Wisconsin.
ON LAMIACEAE:
Clinopodium vulgare L. (*Calamintha Clinopodium* Benth.), Ontario.
Galeopsis Tetrahit L., Wisconsin.
Glecoma hederacea L. (*Nepeta Glechoma* Benth., *Nepeta hederacea* B.S.P.), Wisconsin.
Leonurus Cardiaca L., Ohio, Wisconsin; Ontario.
Lycopus uniflorus Michx., Wisconsin.
Mentha canadensis L., Wisconsin.
Mentha gentilis L. (*Mentha sativa* L.), Maine.
Mentha spicata L., Ohio.
Monarda fistulosa L., Nebraska.
Monarda pectinata Nutt., Kansas.
Monarda punctata L., Wisconsin.
Nepeta Cataria L., Ohio.
Scutellaria galericulata L., Ohio.
Stachys tenuifolia Willd., Wisconsin.
Teucrium canadense L., Wisconsin.
ON SCROPHULARIACEAE:
Leptandra virginica (L.) Nutt. (*Veronica virginica* L.), Wisconsin.
ON CICHORIACEAE:
Hieracium aurantiacum L., Wisconsin.
Lactuca canadensis L., Wisconsin.
ON CARDUACEAE:
Arctium minus Schkuhr (*Lappa minor* DC.), Wisconsin.
Bidens frondosa L., Wisconsin.
Eupatorium perfoliatum L., Wisconsin.
TYPE LOCALITY: Fairfield, Ohio, on *Leonurus Cardiaca*.
DISTRIBUTION: Maine to Delaware, Wisconsin, and Kansas.
EXSICCATI: Ellis, N. Am. Fungi *1165*; Ellis & Ev. N. Am. Fungi *2831*; Ellis & Ev. Fungi Columb. *359*.

233. **Phyllosticta brassicicola** McAlpine, Fung. Dis. Cabb. 37. 1901.

Phyllosticta Brassicae Cooke, Jour. Roy. Hort. Soc. **27**: 801. 1903. Not *Phyllosticta Brassica* Westend. 1867.

Spots definite in form, circular or subcircular, reaching a diameter of 1–10 mm. (averaging 4–5 mm.), brown or grayish in the center, surrounded by an olive-green or bluish-green border, the whole leaf often turning yellow, the border of the spot often showing a tendency to develop concentric rings; pycnidia occurring on either side of the leaf, usually covered by the thin epidermis which becomes raised; pycnidia cylindric or bacteroid, straight or slightly curved, 1.5–2.5 × 2.5–4.5 μ.

Said to be the pycnidial stage of *Mycosphaerella brassicicola*.

ON BRASSICACEAE:
Brassica oleracea L. (cult.), California.
TYPE LOCALITY: Australia, on *Brassica oleracea* (cauliflower shipped from California).
DISTRIBUTION: California; also in Europe and Australia.
ILLUSTRATION: Jour. Roy Hort. Soc. **27**: *pl. 7, f. 95*.

234. **Phyllosticta gossypina** Ellis & Martin, Jour. Myc. **2**: 129. 1886.

Spots rather irregular in form, rusty-brown, surrounded by a narrow, slightly elevated border, similar in appearance on either side of the leaf, the infected spot often surrounded by a purplish area, the main spot reaching a diameter of 3–5 mm.; pycnidia sparingly scattered over the infected spot, reaching a diameter of about 100 μ; spores abundant, rather variable in size and form, about 2–2.5 $\times$ 3–7 μ.

ON MALVACEAE:
Gossypium sp. (cult.), (Alabama?), Mississippi, North Carolina.
TYPE LOCALITY: Not known, on *Gossypium* sp.
DISTRIBUTION: North Carolina to Mississippi.

235. **Phyllosticta Chrysanthemi** Ellis & Dearness, Can. Rec. Sci. **5**: 267. 1893.

Spots subcircular, numerous, several often becoming confluent and irregular, raised on the upper side of the leaf and depressed on the under surface, reaching a diameter of 2–3 mm., yellowish-brown, paler on the under side; pycnidia minute, scattered over the infected spot, mainly on the upper side of the leaf, reaching a diameter of 80–100 μ; spores ellipsoid, slightly smoky, 2–3 $\times$ 4–5 μ.

ON CARDUACEAE:
Chrysanthemum sinense Sabine, Canada.
TYPE LOCALITY: London, Ontario, on *Chrysanthemum sinense*.
DISTRIBUTION: Known only from the type locality.

236. **Phyllosticta ambrosioides** Thüm. Instituto **28**:—[45]. 1881.

Spots small, nearly circular in form or occasionally more or less irregular, becoming white or whitish in the center, surrounded by a purplish border which is slightly elevated and nearly black in dried specimens, reaching a diameter of 1–3 mm., almost equally visible on either side of the leaf; pycnidia scattered, occurring on either side of the leaf, small, black, becoming rather prominent, reaching a diameter of 70–80 μ; spores minute, ellipsoid or allantoid, 1.5 $\times$ 4–5 μ.

ON CHENOPODIACEAE:
Chenopodium ambrosioides L., Delaware, Louisiana, New Jersey.
TYPE LOCALITY: Europe, on *Chenopodium ambrosioides*.
DISTRIBUTION: New Jersey, Delaware, and Louisiana; also in Europe.
EXSICCATI: Ellis & Ev. N. Am. Fungi *1724;* Seym. & Earle, Econ. Fungi *359 a*.

237. **Phyllosticta allantospora** Ellis & Ev. Proc. Acad. Phila. **1894**: 355. 1894.

Spots subcircular in form, brown, with a greenish subindefinite border, reaching a diameter of 3–4 mm.; pycnidia occurring on the upper side of the leaf, subdiscoid, perforate, reaching a diameter of 100–110 μ; spores ellipsoid or short-cylindric, hyaline, usually a little curved, 1.25 $\times$ 3–5 μ.

ON BRASSICACEAE:
Cakile edentula (Bigel.) Hook. (*Cakile americana* Nutt.), New Jersey.
TYPE LOCALITY: Sandy Hook, New Jersey, on *Cakile edentula*.
DISTRIBUTION: Known only from the type locality.

238. **Phyllosticta Garrettii** Sydow, Ann. Myc. **6**: 484. 1908.

Spots circular or subcircular, yellowish, becoming discolored in the center, reaching

a diameter of 1 cm.; pycnidia gregarious, shining, globose or subglobose, reaching a diameter of 60–100 μ, with a conspicuous ostiolum; spores rod-like, without oil-drops, 1 × 3–4 μ.

ON CARDUACEAE:
Senecio dispar A. Nelson, Utah.
TYPE LOCALITY: Big Cottonwood Canyon, Utah, on *Senecio dispar*.
DISTRIBUTION: Known only from the type locality.

239. **Phyllosticta Geranii** Ellis & Ev. Jour. Myc. **3**: 130. 1887.

Spots small, definite, circular or subcircular, or more rarely irregular in form, whitish, the infected tissue thin and translucent and often deciduous, surrounded by a definite, slightly elevated, dark-colored rim, similar on either side of the leaf but paler on the under surface, reaching a diameter of 2–3 mm.; pycnidia scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 80–100 μ; spores very numerous, minute, ellipsoid, 1–2 × 3–6 μ.

ON GERANIACEAE:
Geranium carolinidnum L., Louisiana.
TYPE LOCALITY: Point a la Hache, Louisiana, on *Geranium carolinianum*.
DISTRIBUTION: Known only from the type locality.

240. **Phyllosticta Phytolaccae** Cooke, Grevillea **12**: 25. 1883.

Spots circular or subcircular, pale yellowish-brown, surrounded by a slightly elevated, darker reddish-brown rim, reaching a diameter of 2–3 mm.; pycnidia minute, scattered over the infected spot; spores small, rod-like, about 1 × 4–5 μ, rarely larger.

ON PETIVERIACEAE:
Phytolacca americana L. (*Phytolacca decandra* L.), New Jersey.
Phytolacca sp., Alabama, South Carolina.
TYPE LOCALITY: Aiken, South Carolina, on *Phytolacca* sp.
DISTRIBUTION: New Jersey, South Carolina, and Alabama.
EXSICCATI: Rav. Fungi Am. *514*.

241. **Phyllosticta Rhexiae** Dearness & House; House, Bull. N. Y. State Mus. 179: 35. 1915.

Spots reddish-brown, reaching a diameter of 1.5–2 mm., with a white center which produces a single pycnidium, similar on both sides of the leaf; pycnidium solitary, near the center of the spot, occurring on the upper side of the leaf, brown, reaching a diameter of 40–50 μ; spores elongate, 1 × 3 μ.

ON MELASTOMATACEAE:
Rhexia ciliosa Michx., Florida.
TYPE LOCALITY: Jacksonville, Florida, on *Rhexia ciliosa*.
DISTRIBUTION: Known only from the type locality.

242. **Phyllosticta palustris** Ellis & Dearness, Trans. Can. Inst. **6**: 637. 1899.

Spots irregular or subangular, 1–3 mm. in diameter, rusty-brown, with a whitish center; pycnidia few, usually only one to each spot; spores ellipsoid, 1–1.25 × 3–4 μ.

ON LAMIACEAE:
Stachys palustris L., Ontario.
TYPE LOCALITY: London, Ontario, on *Stachys palustris*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Ellis & Ev. Fungi Columb. *1338*.

243. **Phyllosticta Acanthospermi** Ellis & Ev. N. Am. Phyllost. 57. 1900.

Spots suborbicular, slate-colored or blackish-brown, the margin definite and of the same color, zonate, reaching a diameter of 2–4 mm.; spores ellispoid, hyaline, 1.5–2 × 3–4 μ.

ON CARDUACEAE:
Acanthospermum australe (L.) Kuntze (*Acanthospermum xanthioides* DC.), Florida.
TYPE LOCALITY: Lake City, Florida, on *Acanthospermum xanthioides*.
DISTRIBUTION: Known only from the type locality.

244. **Phyllosticta anemonicola** Sacc. & Syd. in Sacc. Syll. Fung. **14**: 865. 1899.

Phyllosticta Anemones Ellis & Ev. Proc. Acad. Phila. **1894**: 356. 1894. Not *P. Anemones* Fuckel, 1863.

Spots consisting of brownish, dead areas which gradually blend off into the healthy tissue of the leaf, reaching a diameter of 3–5 mm. or rarely larger, about equally visible on either side of the leaf; pycnidia thickly gregarious, depressed, becoming erumpent-superficial, reaching a diameter of 90 to 110 μ, occurring on either side of the leaf; spores minute, rod-like, about 1×5 μ, hyaline.

ON RANUNCULACEAE:
Anemone canadensis L. (*Anemone pennsylvanica* L.), Michigan.
Anemone cylindrica A. Gray, Nebraska.
TYPE LOCALITY: Ann Arbor, Michigan, on *Anemone pennsylvanica*.
DISTRIBUTION: Michigan and Nebraska.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3152*; Ellis & Ev. Fungi Columb. *568*.

245. **Phyllosticta Cornuti** Ellis & Kellerm. Bull. Torrey Club **11**: 115. 1884.

Spots numerous, yellowish or grayish, reaching a diameter of 1–3 mm., roundish or angular, the sides bounded by the veinlets of the leaf, becoming blackish by reason of the numerous pycnidia; pycnidia appearing on either side of the leaf, reaching a diameter of 100–150 μ; spores mostly minute, rod-like, about 1×3–4 μ, (a few originally described as ovoid, 4×5 μ).

ON ASCLEPIADACEAE:
Asclepias syriaca L. (*Asclepias Cornuti* Dec.), Kansas.
TYPE LOCALITY: Manhattan, Kansas, on *Asclepias Cornuti*.
DISTRIBUTION: Known only from the type locality.

246. **Phyllosticta Desmodii** Ellis & Ev. Jour. Myc. **5**: 146. 1889.

Spots definite in outline but very variable in size and form, dark-brown, the older spots whitish in the center, the boundary usually marked by the veins or veinlets of the leaves, reaching a diameter of 1 mm. to 1 cm., about equally visible on either side of the leaf; pycnidia quite numerous, thickly scattered over the infected spot, subglobose, with distinct ostiolum, reaching a diameter of 100–150 μ; spores minute, rod-like, about 1–2×4–5 μ.

ON FABACEAE:
Meibomia Michauxii Vail (*Desmodium rotundifolium* DC.), Indiana.
Meibomia canescens (L.) (*Desmodium canescens* L.), Kuntze, Wisconsin.
TYPE LOCALITY: Walworth County, Wisconsin, on *Desmodium* sp.
DISTRIBUTION: Indiana to Wisconsin; (Ontario?); reported on *Desmodium* sp. [*Meibomia*] from Alabama by Atkinson.

247. **Phyllosticta Brunellae** Ellis & Ev. Proc. Acad. Phila. **1894**: 355. 1894.

Spots irregular in form or subangular, rusty-brown, sharply defined, but with no distinct border, reaching a diameter of 3–4 mm. or often larger, sometimes covering half of the leaf-surface; pycnidia buried in the tissue of the leaf and scarcely visible, minute, dark-colored; spores rod-like, straight, with the ends slightly swollen, 0.5–0.75×3–3.5 μ.

ON LAMIACEAE:
Prunella vulgaris L. (*Brunella vulgaris* Moench), Washington.
TYPE LOCALITY: Seattle, Washington, on *Brunella vulgaris*.
DISTRIBUTION: Washington; also in Europe.

248. **Phyllosticta Collinsoniae** Sacc. & Dearness; Sacc. Ann. Myc. **12**: 299. 1914.

Spots angular, irregular, reaching a diameter of 0.5–1 cm., cinereous to reddish, finally becoming dehiscent; pycnidia occurring on the upper side of the leaf, brownish-black, globose-lenticular, reaching a diameter of 60–120 μ; spores small, often curved, 0.5–1×4–5 μ.

ON LAMIACEAE:
Collinsonia canadensis L., Ontario.
TYPE LOCALITY: London, Ontario, on *Collinsonia canadensis*.
DISTRIBUTION: Known only from the type locality.

249. **Phyllosticta Delphinii** Clements (Crypt. Form. Colo. *468*, hyponym. 1908), sp. nov.

Spots indefinite, dark-brown, reaching a diameter of more than 1 cm., about equally visible on either side of the leaf; pycnidia numerous, quite evenly scattered over the infected spot, mainly on the under side of the leaf, reaching a diameter of 150 μ; spores numerous, rod-like, about 1 $\times$ 4 μ.

ON RANUNCULACEAE:
Delphinium multiflorum Rydb., Colorado.
Type collected at Sulphur Springs, Colorado, on *Delphinium multiflorum*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Clements, Crypt. Form. Colo. *468*.

250. **Phyllosticta Arnicae** (Fuckel) Sacc. Syll. Fung. **3**: 45. 1884.

Ascochyta Arnicae Fuckel, Jahrb. Nass. Ver. Nat. **29–30**: 36. 1875.

Spots irregular or indefinite in form, often marginal, dark reddish-brown, surrounded by a pale-yellowish or purplish area of considerable extent, the main spot often reaching a diameter of 1 cm. and the infected area often covering half of the leaf-surface, about equally visible on either side of the leaf; pycnidia numerous, thickly scattered over the main portion of the spot, reaching a diameter of 100–120 μ; spores abundant, minute, rod-like, about 1 $\times$ 3–4 μ.

ON CARDUACEAE:
Arnica cordifolia Hook., Colorado.
TYPE LOCALITY: Europe, on *Arnica montana*.
DISTRIBUTION: Colorado; also in Europe.
EXSICCATI: Clements, Crypt. Form. Colo. *467*.

251. **Phyllosticta fragaricola** Desmaz. & Roberge; Desmaz. Pl. Crypt. II. *686*. 1859.—Sacc. Michelia **1**: 140. 1878.

?*Phoma obscurans* Ellis & Ev. Proc. Acad. Phila. **1894**: 357. 1894.

Spots at first circular or subcircular, becoming irregular and often finally covering nearly half of the leaf-surface, at first reddish-purple, later becoming reddish-brown, the margin more or less indefinite and often surrounded by a yellowish area which gradually blends off into the healthy tissue of the leaf, paler on the under surface; pycnidia sparingly scattered over the infected spot, reaching a diameter of 100–110 μ; spores abundant, rod-like, 1–2 $\times$ 4–5 μ.

ON ROSACEAE:
Fragaria grandiflora Ehrh., Ontario.
Fragaria sp. (cultivated), New Jersey.
TYPE LOCALITY: Europe, on *Fragaria chiloensis*.
DISTRIBUTION: Ontario to New Jersey (and West Virginia?); also in Europe.

252. **Phyllosticta Dearnessii** Sacc. Ann. Myc. **11**: 549. 1913.

Spots indefinite and more or less irregular, whitish or cinereous in the center, grading off into reddish, finally brown, the brown color often extending around the margin of the leaf, reaching a diameter of nearly 1 cm., visible on both sides but less distinct on the under side; pycnidia scattered over the infected spot, mainly on the upper surface of the leaf, reaching a diameter of 150–180 μ; spores minute, rod-like, 1–1.5 $\times$ 4.5–5 μ.

ON ROSACEAE:
Rubus triflorus Richards., Ontario.
TYPE LOCALITY: Near Lake Huron, Ontario, on *Rubus triflorus*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Barth. Fungi Columb. *4653*.

253. **Phyllosticta verbascicola** Ellis & Kellerm. Bull. Torrey Club **11**: 115. 1884.

Spots large, brown, rather indefinitely limited, reaching a diameter of 5 mm. to 1 cm., several often becoming confluent and then reaching a diameter of 2–4 cm. and giving rise to irregular areas; pycnidia buried in the substratum, reaching a diameter of 100–150 μ; spores subhyaline or pale-brownish, 1.5–2 × 3.5–4 μ, with a few darker and larger.

ON SCROPHULARIACEAE:
Verbascum Lychnitis L., New York.
Verbascum Thapsus L., Kansas.
TYPE LOCALITY: Kansas, on *Verbascum Thapsus*.
DISTRIBUTION: New York and Kansas.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3155;* Ellis & Ev. Fungi Columb. *566;* Ellis & Ev. N. Am. Fungi *3151* and Ellis & Ev. Fungi Columb. *567* (as *Phyllosticta Verbasci* Sacc.).

254. **Phyllosticta Richardsoniae** Ellis & Ev. Jour. Myc. **8**: 62. 1902.

Spots irregular in form, dirty-white, usually occurring at the tips of the leaves which become dead and bleached; pycnidia scattered over the infected spot, subglobose, reaching a diameter of 80–110 μ; spores ellipsoid, abundant, 1.5 × 4 μ.

ON RUBIACEAE:
Richardia scabra L. (*Richardsonia scabra* A. St. Hil.), Alabama.
TYPE LOCALITY: Tuskegee, Alabama, on *Richardsonia scabra*.
DISTRIBUTION: Known only from the type locality.

255. **Phyllosticta ferax** Ellis & Ev. Proc. Acad. Phila. **1894**: 355. 1894.

?*Phoma Lupuli* Ellis & Ev. Bull. Washburn Lab. Nat. Hist. **1**: 6. 1884.

Spots indefinite, the infected area often covering a large part of the leaflet which becomes yellowish and dead; pycnidia very numerous, irregularly scattered or collected in groups, giving to the surface of the leaf a grayish appearance, reaching a diameter of 150 μ; spores very numerous, minute, ellipsoid, 1–1.25 × 3–4 μ.

ON FABACEAE:
Lupinus albifrons Benth., California.
Lupinus formosus Greene, California.
Lupinus humicola A. Nelson, Wyoming.
Lupinus sp., Colorado, Nevada, Washington.
TYPE LOCALITY: Pasadena, California, on *Lupinus albifrons*.
DISTRIBUTION: Wyoming and Colorado to Washington and California.
EXSICCATI: Ellis, N. Am. Fungi *1364;* Clements, Crypt. Form. Colo. *472* (as *Phoma Lupuli*).

256. **Phyllosticta Astragali** Peck, Bot. Gaz. **6**: 275. 1881.

No definite spot, but the entire leaflet pale-yellowish; pycnidia numerous and quite evenly scattered over the entire surface of the leaflet or congested in groups, becoming superficial, conspicuous, black with a distinct ostiolum, reaching a diameter of 200 μ or rarely larger, restricted to the upper side of the leaflet; large spores scant, ovoid, granular within, 6 × 7–9 μ, accompanied by minute rod-like spores which are about 1 × 4–5 μ.

ON FABACEAE:
Astragalus sp., Minnesota; Ontario.
TYPE LOCALITY: Ontario, on *Astragalus* sp.
DISTRIBUTION: Ontario and Minnesota.

257. **Phyllosticta Adoxae** Clements (Crypt. Form. Colo. *242*, hyponym. 1907), sp. nov.

Spots indefinite, often covering the entire leaf which becomes yellowish and dead; pycnidia numerous, subsuperficial and conspicuous, black or brownish-black, quite evenly distributed over the infected portion of the leaf, reaching a diameter of 80–100 μ; spores minute, rod-like, 1–1.5 × 3–4 μ.

ON ADOXACEAE:
Adoxa Moschatellina L., Colorado.
Type collected at Mount Garfield, Colorado, on *Adoxa Moschatellina*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Clements, Crypt. Form. Colo. *242*.

258. **Phyllosticta eximia** Bubák, Sitz.-ber. Böhm. Ges. Wiss. 1903[12]: 11. 1903.

Spots indefinite, the whole leaf being affected and becoming brown; pycnidia very numerous and scattered over the infected leaf, often congested in spots which are blackish in color due to their great numbers, reaching a diameter of about 100 μ; spores small, narrow-ellipsoid, 1–2 × 4 μ.

ON CICHORIACEAE:
Crepis acuminata Nutt., Colorado.
TYPE LOCALITY: Europe, on *Crepis viscidula*.
DISTRIBUTION: Colorado; also in Europe.
EXSICCATI: Clements, Crypt. Form. Colo. *469*.

259. **Phyllosticta abortiva** Ellis & Kellerm. Jour. Myc. 1: 4. 1885.

Spots subcircular, brown, with a definite dark border which is scarcely raised, reaching a diameter of 0.25–1 cm.; pycnidia minute, black, thickly scattered over the infected spot, visible on both sides of the leaf; spores imperfectly developed.

ON MENISPERMACEAE:
Menispermum canadense L., Kansas.
TYPE LOCALITY: Manhattan, Kansas, on *Menispermum canadense*.
DISTRIBUTION: Known only from the type locality.

260. **Phyllosticta Nicotiana** Ellis & Ev. Proc. Acad. Phila. 1893: 157. 1893.

Spots large, irregular, pale dirty-brown, lighter in the center, with a reddish zonate margin, reaching a diameter of 5 mm. to 1.5 cm.; pycnidia numerous, erumpent-superficial, black, depressed-hemispheric, reaching a diameter of 250 μ, with a broad papilliform ostiolum.

ON SOLANACEAE:
Nicotiana Tabacum L., North Carolina.
TYPE LOCALITY: North Carolina, on *Nicotiana Tabacum*.
DISTRIBUTION: Known only from the type locality.

261. **Phyllosticta Quercus-Ilicis** Sacc. Michelia 1: 155. 1878.

Spots subcircular or occasionally slightly irregular in form, whitish or silvery, surrounded by a very narrow blackish line, reaching a diameter of 5–7 mm., visible on either side of the leaf but very faint on the under side; pycnidia scattered over the infected spot, restricted to the upper side of the leaf, reaching a diameter of 100–110 μ; spores numerous, slightly yellowish, about 2 × 4 μ (not as large as indicated in the original description).

ON FAGACEAE:
Quercus virginiana Mill. (*Quercus virens* Ait.), Mississippi.
TYPE LOCALITY: Europe, on *Quercus Ilicis*.
DISTRIBUTION: Mississippi; also in Europe.

262. **Phyllosticta vesicatoria** Thüm. Flora 61: 181. 1878.

Spots large, dry, vesicular, brown, with a purple border; pycnidia occurring on the upper side of the leaf, scattered, globose, semi-immersed, medium-sized, black, with a distinct ostiolum; spores minute, ellipsoid-cylindric, with the ends rounded, straight, hyaline, 1.5 × 2.5 μ.

ON FAGACEAE:
Quercus brevifolia (Lamb.) Sarg. (*Quercus cinerea* Michx.), South Carolina.
TYPE LOCALITY: Aiken, South Carolina, on *Querais cinerea*.
DISTRIBUTION: Known only from the type locality.

263. **Phyllosticta livida** Ellis & Ev. Bull. Torrey Club 24: 285. 1897.

Spots indefinite in outline but reaching a diameter of 1–2 cm., blackish on the upper side of the leaf and brownish below; pycnidia very numerous, covered by the epidermis which is raised into small pustules and occasionally ruptured; spores very minute, about 1 × 3 μ.

ON FAGACEAE:
Quercus Douglasii H. & A., California.
Quercus macrocarpa Michx., Wisconsin.
Quercus nigra L. (*Quercus aquatica* Walt.), Florida.
TYPE LOCALITY: Amador County, California, on *Quercus Douglasii*.
DISTRIBUTION: Wisconsin, Florida, and California.

264. **Phyllosticta castanicola** Ellis & Ev. Proc. Acad. Phila. 1895: 431. 1895.

Spots circular or subcircular in form but rather indefinite in outline, reddish-brown, the color gradually blending off into the healthy tissues of the leaf, reaching a diameter of 5 mm. to 1 cm., scarcely visible on the under side of the leaf; pycnidia immersed, erumpent through the epidermis, single or in clusters or rows, surrounded by the upturned edges of the broken epidermis, reaching a diameter of 100 μ, the pycnidial wall thick and tough; spores numerous, rod-like or allantoid, about 1 × 3–7 μ.

ON FAGACEAE:
Castanopsis chrysophylla (Hook.) DC. (*Castanea chrysophylla* Hook.), California.
TYPE LOCALITY: Sisson, California, on *Castanea chrysophylla*.
DISTRIBUTION: Known only from the type locality.

265. **Phyllosticta confertissima** Ellis & Ev. Proc. Acad. Phila. 1893: 455. 1893.

Spots orbicular, definite in outline, of a uniform dark brick-red color, reaching a diameter of 4–6 mm.; pycnidia occurring on the under side of the leaf only, numerous, minute, reaching a diameter of 75 μ, opening above, scarcely visible without the lens; spores allantoid, about 1 × 3–4 μ.

ON ULMACEAE:
Ulmus fulva Michx., Kansas.
TYPE LOCALITY: Louisville, Kansas, on *Ulmus fulva*.
DISTRIBUTION: Known only from the type locality.

266. **Phyllosticta melaleuca** Ellis & Ev. N. Am. Phyllost. 43. 1900.

?*Phyllosticta ulmicola* Sacc. Michelia 1: 158. 1878.

Spots irregular or subangular, often bounded by the veins and veinlets of the leaf, reaching a diameter of 4–8 mm., cinereous in the center, darker around the outer border, visible on both sides of the leaf, rusty-brown on the under side; pycnidia sparingly scattered over the infected spot, erumpent, reaching a diameter of 100–120 μ; spores subglobose to ellipsoid, 3 μ in diameter, or 2–2.5 × 3–4 μ.

ON ULMACEAE:
Ulmus americana L., Alabama.
Ulmus racemosa Thomas, Wisconsin.
TYPE LOCALITY: Tuskegee, Alabama, on *Ulmus americana*.
DISTRIBUTION: Known only from the type locality.

267. **Phyllosticta Celtidis** Ellis & Kellerm. Jour. Myc. 4: 27. 1888.

?*Phyllosticta destruens* Desmaz. Ann. Sci. Nat. III. 8: 31. 184.

Spots subcircular or more or less irregular, pale yellowish-brown or cinereous, reaching a diameter of 5 mm. to 1 cm., the main spot surrounded by a pale yellowish area, about equally visible on either side of the leaf; pycnidia numerous, minute, black, evenly distributed over the infected spot, restricted to the under side of the leaf, reaching a diameter of 80 μ; spores abundant, about 1–2 × 3–4 μ.

ON ULMACEAE:
Celtis brevipes (S. Wats.) Rydb., New Mexico.
[illegible] Kansas, West Virginia.
TYPE LOCALITY: Kansas, on *Celtis occidentalis*.
DISTRIBUTION: West Virginia to Kansas and New Mexico.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2630*; Ellis & Ev. Fungi Columb. *991*; Vesterg. Micr. Rar. Sel. *1338*.

268. Phyllosticta consors Sacc. Jour. Myc. 12: 51. 1906.

Spots yellowish-brown; pycnidia usually on the under side of the leaf, more rarely on the upper side, densely gregarious, globose, prominent, reaching a diameter of 70–80 μ; spores ellipsoid-oblong, often curved, with two minute oil-drops, 2–2.1 × 4–4.5 μ.

ON ARTOCARPACEAE:
Morus alba L., Mexico (state).
TYPE LOCALITY: Tenancingo, Mexico, on *Morus alba*.
DISTRIBUTION: Known only from the type locality.

269. Phyllosticta clypeata Ellis & Ev. Jour. Myc. 8: 15. 1902.

Spots discoid or shield-shaped, dull-yellowish, surrounded by the upturned epidermis which gradually disappears leaving the margin free, reaching a diameter of 5 mm. to 1 cm.; pycnidia scattered over the infected spot, depressed-globose, slightly prominent, reaching a diameter of 150–200 μ; spores ellipsoid or subglobose, hyaline, 2.5–3 × 3.5–4 μ.

ON MALACEAE:
Malus Malus (L.) Britton (*Pyrus Malus* L.), Oregon.
TYPE LOCALITY: Corvallis, Oregon, on *Pyrus Malus*.
DISTRIBUTION: Oregon (and Illinois?).

270. Phyllosticta limitata Peck, Ann. Rep. N. Y. State Mus. 50: 115. 1897.

Spots usually circular or subcircular in form, more rarely irregular, at first reddish-brown, becoming whitish or cinereous, the margin slightly elevated and distinct, the surrounding tissues more or less discolored, the spots visible on both sides of the leaf but more distinct on the upper side, reaching a diameter of 2–3 mm.; pycnidia numerous, quite evenly scattered over the infected spot, restricted to the upper side of the leaf; spores ellipsoid, at first hyaline, becoming smoky-brown, 3 × 4–5 μ.

ON MALACEAE:
Malus Malus (L.) Britton (*Pyrus Malus* L.), New York, West Virginia.
TYPE LOCALITY: Westbury, Queens County, New York, on *Pyrus Malus*.
DISTRIBUTION: New York and West Virginia.
EXSICCATI: Ellis & Ev. Fungi Columb. *1633*.

271. Phyllosticta paupercula Peck, Bull. N. Y. State Mus. 150: 60. 1911.

Spots rather small and more or less irregular or angular, a number often coalescing and giving rise to a mottled area, whitish or cinereous, visible only on the upper side of the leaf, the tissue of the infected spots thin and translucent; pycnidia sparingly scattered over the infected spot, reaching a diameter of 40–50 μ; spores rather abundant, ellipsoid, about 2 × 3–4 μ.

ON MALACEAE:
Amelanchier sanguinea Nutt., Kansas.
TYPE LOCALITY: Stockton, Kansas, on *Amelanchier sanguinea* Nutt.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Barth. Fungi Columb. *3040*.

272. Phyllosticta ? Crataegi (Cooke) Sacc. Syll. Fung. 3: 6. 1884.

Cheilaria Crataegi Cooke, Grevillea 12: 25. 1883.

Pycnidia erumpent, light-brown, very delicate, occurring on the under side of the leaf, scattered over the entire surface or loosely clustered, reaching a diameter of 100–120 μ; spores ovoid, hyaline, 1.5×3–4 μ.

ON MALACEAE:
Crataegus erythropoda Ashe, New Mexico.
Crataegus villipes Ashe (*Crataegus Holmesiana* Ashe), New York.
Crataegus sp. South Carolina.
TYPE LOCALITY: Aiken South Carolina, on *Crataegus* sp.
DISTRIBUTION: New York, South Carolina, and New Mexico.
EXSICCATI: Rav. Fungi Am. *516*.

273. **Phyllosticta convexula** Bubák, Jour. Myc. 12: 52. 1906.

Spots brownish, indefinite or wanting; pycnidia thickly scattered among the perithecia of *Sphaerella convexula* (Schw.) Thüm., at first subepidermal, finally with the short necks becoming erumpent, black, reaching a diameter of 60–100 μ; spores bacteroid, about 1× 1.5–2 μ.

ON JUGLANDACEAE:
Hicoria alba (L.) Britton (*Carya tomentosa* Nutt.), Missouri.
TYPE LOCALITY: Emma, Missouri, on *Carya tomentosa*.
DISTRIBUTION: Known only from the type locality.

274. **Phyllosticta erythrinicola** E. Young, Mycologia 7: 145. 1915.

Spots subcircular or more rarely irregular, white or whitish, surrounded by a narrow, brownish border which gradually blends off into the healthy tissue of the leaf, similar in appearance on either side of the leaf; pycnidia minute, mostly on the upper side of the leaf, becoming superficial, reaching a diameter of 50–75 μ; spores minute, about 1 × 2 μ.

ON FABACEAE:
Erythrina micropteryx Poepp., Porto Rico.
TYPE LOCALITY: Villa Alba, Porto Rico, on *Erythrina micropteryx*.
DISTRIBUTION: Porto Rico.

275. **Phyllosticta minutissima** Ellis & Ev. Proc. Acad. Phila. 1891: 76. 1891.

Spots subcircular or irregular, reddish-brown, surrounded by a yellowish area which gradually grades off into the healthy tissues of the leaf, with no sharply defined border, reaching a diameter of 5 mm., visibly on both sides of the leaf but much paler on the under side; pycnidia numerous, minute, rather thickly scattered over the infected spot, often congested so that the spots appear blackish, prominent, restricted to the under side of the leaf; spores numerous, very minute, ellipsoid, 0.5–1 × 2 μ.

ON ACREACEAE:
Acer Douglasii Hook., Montana.
Acer glabrum Torr., Colorado, Nebraska, Wyoming.
Acer pennsylvanicum L., New York, Pennsylvania.
Acer saccharinum L., Wisconsin.
TYPE LOCALITY: Sioux County, Nebraska, on *Acer glabrum*.
DISTRIBUTION: New York and Pennsylvania to Montana and Colorado.
EXSICCATI: Ellis & Ev. Fungi Columb. *1244*; Barth. Fungi Columb. *2251, 3735, 4340*.

276. **Phyllosticta Starbaeckii** Sacc. & Syd. in Sacc. Syll. Fung. 14: 865. 1899.

Sphaeria Corni Schw. Trans. Am. Phil. Soc. II. 4: 225. in part. 1832.
Phyllosticta Corni Starb. Bih. Sv. Vet.-Akad. Handl. 19 (3)[2]: 46. 1894. Not *Phyllosticta Corni* Westend. 1867.

Spots large, irregular, indeterminate, violaceous-cinereous or cinereous-brown; pycnidia occurring on the under side of the leaf, densely crowded, cespitose, mostly 2–3 confluent, globose or subglobose, reaching a diameter of 75–125 μ; spores very minute, ellipsoid, hyaline, 0.5–1 × 1.5–2 μ.

ON CORNACEAE:
Cynoxylon floridum (L.) Raf. (*Cornus florida* L.), Pennsylvania.
TYPE LOCALITY: Pocono, Pennsylvania, on *Cornus florida*.
DISTRIBUTION: Known only from the type locality.

277. **Phyllosticta brunnea** Dearness & Barth.; Dearness, Mycologia **9**: 351. 1917.

?*Phyllosticta populea* Sacc. Michelia **1**: 135. 1878.
?*Phyllosticta osteospora* Sacc. Michelia **1**: 531. 1879.

Spots indefinite, grayish or brownish, the color grading off into the healthy tissue of the leaf, reaching a diameter of 5 mm. to 1 cm., visible on both sides of the leaf but very faint on the under surface; pycnidia numerous, thickly scattered over the surface of the infected spot, brownish, giving a brownish tint to the whole spot when present in abundance, depressed, reaching a diameter of 90–150 μ; spores minute, rod-like, 0.75–1 $\times$ 4–6 μ.

ON SALICACEAE:
Populus angustifolia James, Colorado.
Populus sp., Montana.
TYPE LOCALITY: Montrose, Colorado.
DISTRIBUTION: Montana and Colorado; (also in ?Europe).
EXSICCATI: Barth. Fungi Columb. *5040*.

278. **Phyllosticta glauca** Cooke (Grevillea **6**: 136, hyponym. 1878); Ellis & Ev. N. Am. Phyllost. 4. 1900.

Septoria glauca Cooke; Sacc. Syll. Fung. **3**: 64, as synonym. 1884.
Depazea glauca Sacc. Syll. Fung. **3**: 64. 1884.

Spots circular or subcircular in form, at first small and almost entirely black, increasing in size until they reach a diameter of 1 cm., becoming nearly white with the black color restricted to a very narrow border which is slightly elevated, the main spot surrounded by a yellowish area which gradually blends off into the healthy tissues of the leaf, the spot indistinctly visible on the under side of the leaf; pycnidia minute and about evenly distributed over the spot, visible on the under side of the leaf but opening upward, reaching a diameter of less than 100 μ; spores minute, short-cylindric or rod-shaped, 1 $\times$ 4 μ.

ON MAGNOLIACEAE:
Magnolia glauca L., Alabama, Florida.
TYPE LOCALITY: Gainsville, Florida, on *Magnolia glauca*.
DISTRIBUTION: Florida and Alabama.
EXSICCATI: Rav. Fungi Am. *93*.

279. **Phyllosticta Platani** Sacc. & Speg.; Sacc. Michelia **1**: 153. 1878.

Spots large, brown, turning gray, rather indefinite in form; pycnidia dark-brown, lenticular, erumpent, mostly on the under side of the leaf, reaching a diameter of 90 μ; spores hyaline, oblong, 1 $\times$ 4 μ.

ON PLATANACEAE:
Platanus sp., Alabama, Kansas.
TYPE LOCALITY: Europe, on *Platanus orientalis*.
DISTRIBUTION: Alabama and Kansas; also in Europe.

280. **Phyllosticta virginiana** (Ellis & Halsted) Seaver.

Phoma virginiana Ellis & Halsted, Jour. Myc. **4**: 8. 1888.

Spots large and irregular, often covering a large part of the leaf, becoming dead and brown or occasionally cinereous, visible on both sides of the leaf but more distinct on the upper surface, reaching a diameter of 3–4 cm.; pycnidia numerous, thickly gregarious, often giving the infected spot a blackish appearance, occurring on either side of the leaf, reaching a diameter of 80–100 μ; spores abundant, minute, rod-like, about 1 $\times$ 5 μ.

ON MALACEAE:
Amelanchier canadensis (L.) Medic., New York.
Amelanchier sp., Wisconsin.
ON AMYGDALACEAE:
Prunus americana Marsh., Kansas.
Padus melanocarpa (A. Nelson) Shafer (*Prunus demissa* Walp., *Cerasus demissa melanocarpa* A. Nelson), Kansas, Montana.
Padus nana (Du Roi) Roemer (*Prunus nana* Du Roi), Montana.

Padus virginiana (L.) Mill. (*Prunus virginiana* L., *Prunus serotina* Ehrh.), Iowa, Kansas.
TYPE LOCALITY: Ames, Iowa, on *Prunus virginiana*.
DISTRIBUTION: New York to Kansas and Montana.
EXSICCATI: Ellis, N. Am. Fungi *1447;* Ellis & Ev. N Am. Fungi *2676* (as *P. destruens* Desm.) *2830;* Ellis & Ev. Fungi Columb. *2135;* Barth. Fungi Columb. *4836* (as *P. destruens*).

281. **Phyllosticta viridis** Ellis & Kellerm. Jour. Myc. **5**: 142. 1889.

Spots irregular in form and with no definite border, yellowish-brown, the diseased area gradually blending into the healthy tissues of the leaf, reaching a diameter of 1 cm. or occasionally covering half the surface of the leaf; pycnidia numerous, quite evenly distributed over the infected spot and often so thickly gregarious as to give the spot a blackish appearance, restricted to the under side of the leaf, reaching a diameter of 60–75 μ; spores very minute, about 1 × 4–5 μ.

ON OLEACEAE:
Fraxinus americana L., Illinois, New York.
Fraxinus pennsylvanica Marsh. (*Fraxinus lanceolata* Borkh., *Fraxinus viridis* Michx.), Kansas, Louisiana, Nebraska, South Dakota.
Fraxinus sp., Connecticut.
TYPE LOCALITY: Rock County, Kansas, on *Fraxinus viridis*.
DISTRIBUTION: Connecticut to South Dakota and Louisiana.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2834;* Barth. Fungi Columb. *2548*.

282. **Phyllosticta Betulae** Ellis& Ev.; Shear, N. Y. Fungi *367*. 1896.

Spots circular or subcircular or occasionally irregular, yellowish or whitish, often with a very narrow blackish border, reaching a diameter of 3–4 mm., or rarely as large as 1 cm., visible on either side of the leaf but more distinct on the upper side; pycnidia scattered or clustered near the center of the spot, conspicuous, black, reaching a diameter of 100–150 μ; spores ellipsoid, 1.25–1.5 × 4–4.5 μ, or some minute, 0.75–1 × 2.5 μ.

ON BETULACEAE:
Betula lenta L., New York.
TYPE LOCALITY: Alcove, New York, on *Betula lenta*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Shear, N. Y. Fungi *367*.

283. **Phyllosticta Coccolobae** Ellis & Ev.; Ellis, Rep. Mo. Bot. Gard. **9**: 118. 1898.

Spots circular or subcircular in form, often two or three coalescing and forming one compound spot of irregular form, at first reddish-brown, finally becoming white or whitish with a blackish border, reaching a diameter of 1 cm.; pycnidia abundant, minute, quite evenly scattered, restricted to the under side of the leaf; spores minute, rod-like, 1–2 × 3–4 μ.

ON POLYGONACEAE:
Coccolobis uvifera (L.) Jacq., Bahamas.
Coccolobis sp., Mona Island.
TYPE LOCALITY: Nassau, Bahamas, on *Coccolobis uvifera*.
DISTRIBUTION: West Indies.

284. **Phyllosticta Nyssae** Cooke, Grevillea **12**: 26. 1883.

Spots subcircular or irregular, yellowish-brown or cinereous, surrounded by a purplish border, often coalescing and then covering half the surface of the leaf, giving it an irregularly mottled appearance; pycnidia scattered over the infected area, small, reaching a diameter of 65–100 μ; spores ellipsoid or subellipsoid, 1.5 × 3.5 μ.

ON CORNACEAE:
Nyssa aquatica L., Alabama.
Nyssa Ogeche Marsh. (*Nyssa capitata* Walt.), Georgia.
Nyssa sylvatica Marsh., New York.
TYPE LOCALITY: Darien, Georgia, on *Nyssa capitata*.
DISTRIBUTION: New York, Georgia, and Alabama.
EXSICCATI: Rav. Fungi Am *798;* Ellis, N. Am. Fungi *1168*.

285. **Phyllosticta Lentaginis** Sacc. & Syd. in Sacc. Syll. Fung. **14**: 865. 1899.

Phyllosticta Viburni Ellis & Dearness, Can. Rec. Sci. **5**: 267. 1893. Not *Phyllosticta Viburni* Pass. 1886.

Spots rusty-brown, circular or subcircular with a narrow dark border; pycnidia occurring on the upper side of the leaf, partially erumpent, black, reaching a diameter of 100–120 μ; spores ellipsoid, brownish, 2.5–3 × 4–5 μ.

ON CAPRIFOLIACEAE:
Viburnum Lentago L., Ontario.
TYPE LOCALITY: London, Ontario, on *Viburnum Lentago*.
DISTRIBUTION: Known only from the type locality.

286. **Phyllosticta aesculicola** Sacc. Michelia **1**: 134. 1878.

Phyllosticta Aesculi Ellis & Martin, Jour. Myc. **2**: 130. 1886.

Spots large, indefinite, sometimes covering half the surface of the leaflet, rusty-red on the upper surface of the leaf, paler below, margin indefinite, gradually blending off into the healthy tissue of the leaflet; pycnidia few, usually clustered in groups over the discolored spot, small, reaching a diameter of 40–50 μ; spores ellipsoid, minute, 1–2.5 × 3–5 μ.

ON AESCULACEAE:
Aesculus glabra Willd., Missouri, Virginia.
Aesculus Pavia L., Mississippi.
TYPE LOCALITY: Europe, on *Aesculus Hippocastanum*.
DISTRIBUTION: Virginia, Missouri, and Mississippi; also in Europe.
EXSICCATI: Ellis & Ev. N. Am. Fungi *1723*.

287. **Phyllosticta kalmicola** (Schw.) Ellis & Ev. Proc. Acad. Phila. **1893**: 454. 1893.

Sphaeria kalmicola Schw. Trans. Am. Phil. Soc. II. **4**: 226, in part. 1832.
Depazea kalmicola Rav. Fungi Car. **3**: *71*. 1855.

Spots circular or subcircular in form, white or whitish, surrounded by a slightly raised, purplish-red border, the color gradually blending off into the healthy tissues of the leaf, reaching a diameter of 2–3 mm., or more rarely several coalescing giving rise to one compound spot of irregular form and reaching a diameter of 1 cm., visible on the under side of the leaf as a reddish-brown spot; pycnidia restricted to the upper side of the leaf, numerous, scattered over the infected area, minute, black, reaching a diameter of 100–120 μ; spores very minute, rather scant, 1 × 2–3 μ.

ON ERICACEAE:
Kalmia latifolia L., Delaware, District of Columbia, Maryland, Mississippi, New Jersey, New York, Pennsylvania.
TYPE LOCALITY: Bethlehem, Pennsylvania, on *Kalmia* sp.
DISTRIBUTION: New York to Maryland, and Mississippi.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2935;* Ellis & Ev. Fungi Columb. *69;* Rav. Fung. Car. 3: *71*.

288. **Phyllosticta Saccardoi** Thüm. Instituto **28**: —[48]. 1881.

Phyllosticta Rhododendri Sacc. Michelia **1**: 531. 1879. Not *Phyllosticta Rhododendri* Westend. 1851.

Spots subcircular, semicircular (when occurring at the margin of the leaf), or more often irregular, often covering half of the leaf, usually the outer half, white, whitish, or with a brownish border, reaching a diameter of 2–3 cm., visible on both sides of the leaf, the under side reddish-brown; pycnidia rather numerous, quite evenly distributed over the infected spot, restricted to the upper surface of the leaf, minute, erumpent through the epidermis, reaching a diameter of 100 μ; spores small, ellipsoid, or occasionally allantoid, 1–2 × 4–5 μ.

ON ERICACEAE:
Rhododendron sp., New York.
TYPE LOCALITY: Europe, on *Rhododendron ponticum*.
DISTRIBUTION: New York; also in Europe.

289. **Phyllosticta putrefaciens** Shear, Bull. Torrey Club **34**: 307. 1907.

Spots wanting or indistinct; pycnidia gregarious, buried or superficial, globose or subglobose, dark-brown or nearly black, reaching a diameter of 75–100 μ, with a conspicuous ostiolum; spores variable in form, ovoid or ovoid-ellipsoid, often unequal-sided or slightly curved, hyaline or faintly yellowish in mass, 2.5–3 × 3.5–5 μ, attached by a very short sporophore.

ON ERICACEAE:
Oxycoccus macrocarpus (Ait.) Pursh (*Vaccinium macrocarpon* Ait.), Massachusetts, New Jersey.
TYPE LOCALITY: Whitesville, New Jersey, on *Vaccinium macrocarpon*.
DISTRIBUTION: Massachusetts to New Jersey.

290. **Phyllosticta Linderae** Ellis & Ev. Jour. Myc. **4**: 9. 1888.

Spots rather large, circular or subcircular in form, yellowish or cinereous, rather indefinite in outline, usually reaching a diameter of about 1 cm., about equally visible on either side of the leaf; pycnidia very numerous, minute, thickly scattered over the infected spot, mainly on the under side of the leaf, reaching a diameter of 60–75 μ; spores minute, rod-like, 0.5 ×3–4 μ.

ON LAURACEAE:
Benzoin aestivale (L.) Nees (*Lindera Benzoin* Blume), Delaware.
TYPE LOCALITY: Faulkland, Delaware, on *Lindera Benzoin*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2154*.

291. **Phyllosticta Sophorae** Ellis & Ev. Proc. Acad. Phila. **1891**: 77. 1891.

Spots circular or nearly so, small, scarcely exceeding a diameter of 1 mm., whitish in the center with an elevated blackish border, less conspicuous on the under side of the leaf, not discolored around the spot; pycnidia few, usually only one on each spot, subglobose, reaching a diameter of 100–150 μ; spores numerous, 0.75 × 1.5–2.5 μ.

ON FABACEAE:
Sophora secundiflora (Ortega) DC. (*Sophora speciosa* Benth.), Texas.
TYPE LOCALITY: San Antonio, Texas, on *Sophora speciosa*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Ellis & Ev. N. Am. Fungi *2683*.

292. **Phyllosticta Toxicodendri** Thüm. Flora **61**: 180. 1878.

Spots small, reddish-brown, irregular or subcircular, with a dark-red border; pycnidia occurring on the upper side of the leaf, scattered or solitary, black, medium-sized, lenticular; spores ellipsoid, hyaline, 1 × 1.5 μ, usually with an oil-drop.

ON ANACARDIACEAE:
Toxicodendron Toxicodendron (L.) Britton (*Rhus Toxicodendron* L.), South Carolina.
TYPE LOCALITY: Aiken, South Carolina, on *Rhus Toxicodendron*.
DISTRIBUTION: Known only from the type locality.

293. **Phyllosticta spermoides** Peck, Ann. Rep. N. Y. State Mus. **40**: 58. 1887.

Phyllosticta turmalis Ellis & Ev. Erythea **2**: 23. 1894.

Spots subcircular or irregular in form, pale-brown or cinereous in the center, surrounded by a dark-brown area, with a more or less indefinite outline, reaching a diameter of 5 mm., the spots giving the whole leaf a mottled appearance; pycnidia numerous, small, reaching a diameter of 60–70 μ; spores numerous, minute, rod-like, slightly thickened at the ends, 1× 3.5–4.5 μ.

ON VITACEAE:
Vitis vulpina L. (*Vitis riparia* Michx.), Illinois, Kansas, New York; Ontario.
TYPE LOCALITY: Gansevoort, New York, on *Vitis riparia*.
DISTRIBUTION: Ontario to Kansas.
EXSICCATI: Ellis & Ev. Fungi Columb. *2047*; Seym. & Earle, Econ. Fungi *411*.

294. **Phyllosticta opaca** Ellis & Ev.; Millsp. & Nutt. Field Mus. Publ. Bot. **1**: 106. 1896.

Spots usually marginal or terminal, more or less irregular in form, dirty-white, with a narrow, slightly elevated brownish rim which separates the infected area from the healthy tissue of the leaf, visible but paler on the under side of the leaf; pycnidia numerous, quite evenly scattered over the infected area, erumpent and rather conspicuous; spores minute, ellipsoid or rod-like, about 1–1.5 × 3–4 μ.

ON AQUIFOLIACEAE:
Ilex opaca Ait., West Virginia.
TYPE LOCALITY: Nuttallburg, West Virginia, on *Ilex opaca*.
DISTRIBUTION: Known only from the type locality.
EXSICCATI: Ellis & Ev. N. Am. Fungi *3443*.

295. **Phyllosticta Diervillae** Davis, Trans. Wis. Acad. **16**: 761. 1909.

Spots irregular, frequently apical, brown, with an indefinite yellow border, reaching a diameter of 1–4 cm.; pycnidia scattered, globose, rather light-brown, reaching a diameter of 80–110 μ; spores hyaline, ellipsoid, 1.5–2 × 3–5 μ.

ON CAPRIFOLIACEAE:
Diervilla Diervilla (L.) MacM. (*Diervilla trifida* Moench.), Wisconsin.
TYPE LOCALITY: Gordon, Wisconsin, on *Diervilla trifida*.
DISTRIBUTION: Known only from the type locality.

296. **Phyllosticta corylaria** Sacc. Michelia **1**: 158. 1878.

Spots nearly circular in form, the main portion of the spot cinereous or whitish, reaching a diameter of 2 mm., surrounded or partially surrounded by a purplish, more or less irregular area, only faintly visible on the under side of the leaf; pycnidia few, scattered, becoming very faintly smoky, about 2–3 × 4 μ.

ON BETULACEAE:
Corylus rostrata Ait., Ontario.
TYPE LOCALITY: Europe, on *Corylus Avellana*.
DISTRIBUTION: Ontario; also in Europe.

297. **Phyllosticta Xylopiae** Sacc. Ann. Myc. **11**: 548. 1913.

Spots subcircular, white, glistening, grayish on the under side, reaching a diameter of 2–3 mm., with a slightly elevated, black margin; pycnidia sparingly scattered over the infected spot, mainly on the upper side of the leaf, lenticular, reaching a diameter of 180 μ, with a circular or irregular ostiolum; spores ellipsoid, 2 × 4–4.5 μ, hyaline, with two oil-drops

ON ANNONACEAE:
Xylopia sp., Veracruz.
TYPE LOCALITY: Orizaba, Veracruz, on *Xylopia* sp.
DISTRIBUTION: Known only from the type locality.

298. **Phyllosticta Deutziae** Ellis & Ev. Jour. Myc. **5**: 146. 1889.

Spots definite, circular or almost circular in form, occasionally two or three coalescing and then becoming irregular, individual spots reaching a diameter of 1–2 mm., yellowish or whitish, surrounded by a slightly elevated rim, similar in appearance on either side of the leaf; pycnidia few, scattered over the infected spot, on both sides of the leaf but more abundant on the upper side, reaching a diameter of 100–150 μ; spores abundant, ellipsoid, hyaline or very faintly smoky, about 3 × 4–5 μ.

ON SAXIFRAGACEAE:
Deutzia sp., New Jersey.
TYPE LOCALITY: New Brunswick, New Jersey, on *Deutzia* sp. (cultivated).
DISTRIBUTION: Known only from the type locality.

299. **Phyllosticta borinquensis** E. Young, Mycologia 7: 147. 1915.

Spots circular usually, or subcircular, occasionally more or less irregular in form, yellowish or whitish in the center, surrounded by a reddish-brown area, reaching a diameter of 5 mm. or rarely larger, faintly visible on the under side of the leaf; pycnidia abundant, rather thickly clustered near the center of the spot, visible on the under side of the leaf but apparently opening on the upper side, reaching a diameter of 100–200 μ; spores ovoid, 1–1.5 × 2.5–5 μ.

Accompanied by an Ascomycete which may be its perfect stage.

ON STERCULIACEAE:
Helicteres jamaicensis Jacq., Porto Rico.
TYPE LOCALITY: San German, Porto Rico, on *Helicteres jamaicensis*.
DISTRIBUTION: Porto Rico.

300. **Phyllosticta discincola** Ellis & Ev. Proc. Acad. Phila. 1893: 454. 1893.

Spots circular, subcircular, or more or less irregular in form, visible on both sides of the leaf, elevated on the upper side and depressed on the under side with a distinctly elevated border, reaching a diameter of 4 mm., yellowish or yellowish-white; pycnidia sparingly scattered over the surface of the spot, erumpent, restricted to the upper surface of the leaf, reaching a diameter of 100–110 μ; spores rather abundant, ellipsoid, 2–3 × 4–5 μ.

ON OLEACEAE:
Forsythia sp. (cult.), District of Columbia
TYPE LOCALITY: District of Columbia, on *Forsythia* sp.
DISTRIBUTION: Known only from the type locality.

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DOUBTFUL AND EXCLUDED SPECIES

(This list includes a few species overlooked until the foregoing treatment of the genus was in press.)

PHYLLOSTICTA AFFINIS Ellis & Kellerm. Am. Nat. **17**: 1165. 1883. Reported on *Sassafras Sassafras* (L.) Karst. Said by Ellis (N. Am. Phyllost. 43) to be identical with *Gloeosporium Sassafras* (Cooke) Ellis & Ev.

PHYLLOSTICTA ALLIARIAEFOLIAE Allesch. in Rab. Krypt.-Fl. 1^6: 109. 1898. This has been reported from New Jersey on leaves of cultivated *Campanula*. (Bull. N. J. Exp. Sta. 313: 62.)

PHYLLOSTICTA ATRIPLICIS Desmaz. Ann. Sci. Nat. III. **16**: 298. 1851. This species has been reported from several localities. Thought to be a *Septoria* or *Stagonospora* (Trans. Wis. Acad. **19**: 683).

PHYLLOSTICTA AUERSWALDII Allesch. in Rab. Krypt.-Fl. 1^6: 25. 1898. Reported from New Jersey on leaves of *Buxus sempervirens* L. (cult.). (Bull. N. J. Exp. Sta. 313: 62.)

PHYLLOSTICTA CHENOPODII Westend.; Westend. & Wall. Herb. Crypt. *959*. 1854. Although frequently reported from North America on *Chenopodium album* L., all of the specimens examined have been found to be a *Septoria*. In fact, Winter (Rab.-Wint. Fungi Eur. *3500*. 1886) has made this a *Septoria* and adopted the name *Septoria Westendorpii* since there was previously a *Septoria Chenopodii* Westend. According to Ellis the species can scarcely be distinguished from *Septoria Atriplicis* (Desm.) Ellis & Ev.

PHYLLOSTICTA CISSICOLA Speg. Anal. Mus. Nac. Buenos Aires III. **13**: 332. 1910. This species has been reported from Porto Rico (Mycologia **8**: 147) on *Cissus sicyoides* L. Specimens examined seem to be sterile.

PHYLLOSTICTA CLUSIAE F. L. Stevens, Trans. Ill. Acad. **10**: 195. 1918. Not *P. Clusiae* Allesch.; P. Henn. Hedwigia **36**: 237. 1897. The name is untenable, having been previously used for a species which apparently has different spore-characters. Described from Porto Rico, on *Clusia rosea* Jacq.

PHYLLOSTICTA COLOCASIAE Höhnel, Sitz-ber. Akad. Wien **116**[1]: 142. 1907. Reported on *Dieffenbachia* sp. in Porto Rico by Miss Esther Young (Mycologia **7**: 144).

PHYLLOSTICTA COLOCASICOLA Höhnel, Sitz-ber. Akad. Wien **116**[1]: 142. 1907. Reported on *Caladium* sp. (*Colocasia* sp.) in Porto Rico by Miss Esther Young (Mycologia **7**: 144). In the specimen examined the spores are much larger than indicated for this species.

PHYLLOSTICTA CORYLINA Ellis & Martin, Am. Nat. **18**: 1264. 1884. This is said to be a synonym of *Gloeosporium Coryli* (Desm.) Sacc. It occurs on *Corylus americana* Walt.

PHYLLOSTICTA CRATAEGICOLA Sacc. Syll. Fung. **3**: 6. 1884. *Phyllosticta Crataegi* Speg. Michelia **1**: 483. 1879. This species has been reported by Dr. J. F. Brenckle from Kulm, North Dakota, on *Crataegus mollis* (T. & G.) Scheele. (Mycologia **10**: 218.)

PHYLLOSTICTA FILIPENDULINA Sacc. & Speg.; Sacc. Michelia **1**: 276. 1878. *Phyllosticta Filipendulae* Sacc. & Speg.; Sacc. Michelia **1**: 150. 1878. Not *P. Filipendulae* Sacc. Michelia **1**: 145. 1878. A specimen collected at Lyndonville, New York, on *Spiraea hypericifolia* and referred to this species has colored spores and is probably not a good *Phyllosticta*.

PHYLLOSTICTA HELLEBORICOLA COPTIDIS Sacc. & Scalia; Sacc. Harriman Alaska Exp. Crypt. 21. 1904. The variety has been reported from Unalaska on *Coptis trifolia* (L.) Salisb. Neither the species nor the variety has been seen by the writer.

PHYLLOSTICTA INNUMERA Cooke & Hark. Grevillea **9**: 84. 1881. No host is given and the identity of the species is uncertain.

PHYLLOSTICTA LANTANAE F. L. Stevens, Trans. Ill. Acad. **10**: 195. 1918. Not *Phyllosticta Lantanae* Pass. Erb. Critt. Ital. II. *1290*. 1882. The name is untenable. The species was described on *Lantana* from Porto Rico.

PHYLLOSTICTA LEUCOCARPAE Atk. Bull. Cornell Univ. **3**: 31. 1897. The species was described by Atkinson from near Pike Road, Alabama, on *Pyrus leucocarpa*. No record of such a host could be found. On Sept. 18, 1918, a letter of inquiry was addressed to Prof. Atkinson which reached him while on his western trip. In his reply he stated that he could not look the matter up until his return to Ithaca; his death occurred shortly after.

PHYLLOSTICTA LYCHNIDIS (Kunze & Schmidt) Ellis & Ev. N. Am. Phyllost. 59. 1900. *Sphaeria Lychnidis* Kunze & Schmidt, Myk. Hefte **2**: 53. 1823. Specimens distributed by Ellis & Ev. in N. Am. Fungi *2839* are said to be sterile and therefore doubtful. Reported on *Lychnis alba* Mill. (*L. vespertina* Sibth.).

PHYLLOSTICTA MACULIFORMIS Sacc. Michelia **2**: 538. 1882. Reported on fallen leaves of *Alnus rugosa* (Du Roi) Spreng., from Indian Lake, New York. (Bull. N. Y. State Mus. 197: 49.)

PHYLLOSTICTA MEDICAGINIS (Fuckel) Sacc. Syll. Fung. **3**: 42. 1884. *Ascochyta Medicaginis* Fuckel, Fungi Rhen. *488*. 1863. This has been reported on *Medicago sativa* L., and is thought by some to represent the pycnidial stage of *Pyrenopeziza Medicaginis* Fuckel.

PHYLLOSTICTA PADI Brunaud, Soc. Sci. Nat. Charente-Infér. Ann. **26**: 52. 1890. Originally reported on *Prunus Padus*. Recorded for North America on *Padus virginiana* (L.) Mill. See Barth. Fungi Columb. *4655*.

PHYLLOSTICTA PANDANICOLA E. Young, Mycologia **7**: 150. 1915. The mature spores of this species appear to be 1-septate, which would put it in the genus *Ascochyta*.

PHYLLOSTICTA PYRINA Sacc. Michelia **1**: 134. 1878. According to J. L. Sheldon (Torreya **7**: 143) this ia a *Coniothyrium* and has been called by him *Coniothyrium pyrinum*. On *Pyrus communis* L. Widely distributed in Eastern United States.

PHYLLOSTICTA RENOUANA Sacc. & Roum. Rev. Myc. **6**: 32. 1884. Reported by J. J. Davis from Wisconsin on *Typha latifolia* L. (Trans. Wis. Acad. **17**: 865.)

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